

Canyonlands National Park and Orange Cliffs Unit of
Glen Canyon National Recreation Area

Backcountry Management Plan



January 6, 1995

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Canyonlands National Park
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Moab, Utah 84532

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EXECUTIVE SUMMARY

PROJECT: Backcountry Management Plan

LOCATION: **Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area (Utah)**

SUMMARY OF ACTION: The goal of this plan was to develop backcountry management strategies to protect park resources, provide for high quality visitor experiences, and be flexible to deal with changing conditions. Annual visitation to Canyonlands quadrupled between 1984 (105,646 visitors) and 1993 (434,844 visitors). As a result, resource impacts have increased and the quality of the visitor experience has diminished.

The planning process began in 1992 by inviting the public to identify what issues and topics should be addressed in the plan. A Notice of Intent to prepare the plan was printed in ***the Federal Register***. Scoping questionnaires were distributed and responses analyzed. Thirty-eight issues were identified. A newsletter was prepared and sent to interested parties and six public meetings were held in Utah and Colorado in late 1992 seeking input on how to address those concerns. Over 200 responses were received by February 1993. A draft plan and environmental analysis was prepared and over 2,000 copies were distributed beginning in December 1993. Six additional public meetings and numerous presentations to groups were made. The comment period closed March 5, 1994 with 2,235 written comments received. Comments were analyzed throughout 1994 and the final plan prepared in December 1994.

MAJOR DECISIONS:

--Nineteen backcountry zones will be established for overnight backpacking use. Only three of the zones will have designated backcountry campsites; all other zones will allow at-large camping. Limits will be placed on the number of permits issued for each zone for any given night. A total of 63 backpack permits will be available each night.

--Backcountry permits will be required for all overnight use (including camping with a vehicle), day use with pack and saddle stock, and day use in Salt Creek and Horse and Lavender canyons. Rock climbing day use will not require a permit.

--A backcountry reservation system will be implemented in early 1995 to accept advance reservations for overnight backpacking, backcountry vehicle sites and, eventually, day use in Salt Creek and Horse and Lavender canyons. An appropriate reservation fee, depending on activity, will be charged to off-set costs of establishing the unfunded reservation office and maintaining backcountry facilities, primarily vault toilets at vehicle sites.

--Limits will be placed on how long backcountry campers can stay in any one zone (7-10 days) with a limit of 14 consecutive days per trip allowed.

--Group size limits will be applied to all backpacking groups no matter what the nature of the party. Island in the Sky (Island) District and Needles District will allow 7 per party; Maze District will allow 5.

--Group size limits will be applied to all vehicle sites. Island will allow 15 persons and 3 vehicles per site. Needles will allow 10 persons and 3 vehicles. Maze will allow 9 persons and 3 vehicles. A group site allowing 16 people and 5 vehicles will be established at Flint Seep (Orange Cliffs). Vehicle campers must use designated sites. There are 52 vehicle sites available nightly.

--Few areas will be closed to camping or entry. Closed to camping will be areas below and visible from Maze Overlook, Pete's Mesa (Maze), Horseshoe Canyon (detached unit), and day use zones in the Island and Needles. Areas closed to entry are Virginia Park (Needles), Jasper Canyon (Maze), and critical bighorn sheep habitat in the Needles between May 1 and September 1.

--Guided walks will be offered but participation will not be required, at this time, to enter Horseshoe Canyon (detached unit). Any group will be limited to 20 in Horseshoe Canyon unless with a NPS Park Ranger.

--Wood fires will be prohibited throughout the backcountry. Fire grates will be removed. Wood gathering will continue to be prohibited. Charcoal fires will be allowed at designated backcountry vehicular sites within a fire pan provided by the camper. Ashes and charcoal must be carried out.

--Several road closures will be implemented. Murphy Point Road (Island) will be closed (approximately 0.5 miles) at the current trailhead. Cyclone Canyon Road (Needles) will be closed. Davis Canyon Road (Needles) will be closed (approximately 3 miles) at the park boundary with a designated parking area. Salt Creek Road (Needles) will remain open to the current Angel Arch parking area; however, the 0.5 mile section from Angel Arch to Bates Wilson Camp will be closed.

--Several roads will have limited vehicle access including Salt Creek and Horse and Lavender Canyons. Access will be controlled by locked gates. Day use permits will be required and allow 10 private vehicles, 2 commercial vehicles, 7 bicycles, and 7 pack or stock animals per day in the Horse/Salt area. In Lavender Canyon, the same will apply except that 8 private vehicles will be allowed per day.

--Backcountry toilets will be maintained, for the time being, in the Needles and Island at vehicle sites, and Lathrop Canyon day use area (Island). In the Maze, since backcountry toilets cannot be satisfactorily maintained, vehicle users will have to carry out their solid human waste as do all river runners currently. Burying of solid human waste will be allowed for backpackers, however, they must carry out their toilet paper.

--Trash or garbage cans will not be provided in the backcountry.

--Generators will not be permitted in the backcountry and acceptable noise levels have been established for the backcountry.

--Pets will be prohibited in all backcountry areas.

--Only horses, mules and burros will be permissible pack and stock animals. Llamas and goats will not

be permitted. No commercial pack or stock use will be allowed. Stock will be allowed only on park roads, with some exceptions in the Orange Cliffs area. Overnight trips using stock will be allowed to use vehicle campsites. **Pelletized** feed must be used 48 hours prior to and during any trip. Future restrictions may be necessary if information indicates domestic stock disease may threaten wildlife populations such as bighorn sheep.

--Technical rock climbing will be allowed in most areas of the park. Climbing and canyoneering will be free or clean aid climbing. No new fixed protection will be allowed except on existing routes where unsafe existing protection can be replaced. Motorized drills are prohibited.

--Areas closed to rock climbing include: Salt Creek (Needles) Archeological District, Horseshoe Canyon (detached unit), or any named arch or bridge on USGS maps except Washer Woman Arch (Island). Climbing, ascending, descending, or traversing any archeological or cultural site is prohibited.

--Vehicles must stay on designated roads. Vehicles and drivers must meet Utah State Licensing requirements. ATV's are not permitted in the park.

--Bicycles, including mountain bikes, are considered vehicles, hence, all regulations applying to motor vehicles apply to bicycles.

--Certain archeological sites will not have their locations disclosed to the public as allowed for in federal law. Visiting archeological sites will be permitted but, entering archeological structures is prohibited by Federal law and will be strictly enforced.

--Caching, but not burying, of food and water for extended backcountry trips will be allowed with written permission of the District Ranger.

--The plan is expected to guide the management of the backcountry of Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area for at least five years and may be reviewed and updated as needed.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
I. INTRODUCTION	1
A. PURPOSE AND SIGNIFICANCE	1
B. PLANNING AREA DEFINED	2
C. BACKCOUNTRY DEFINED	2
D. THE PLANNING PROCESS AND NEPA	2
II. VISITOR ACTIVITIES AND MANAGEMENT SOLUTIONS	3
A. ZONING..	3
B. RESERVATION AND PERMIT SYSTEM	3
C. AIRCRAFT AND OVERFLIGHTS	3
D. BICYCLEUSE	5
E. CACHES..	5
F. CAMPING..	5
1. Permits and reservations	5
2. At-large and designated campsites	5
3. Number of nights campers may remain in a zone	7
4. Overnight parking	7
5. Group size	7
6. Vehicle and bicycle camping	8
7. Areas closed to camping	8
G. CLOSURES..	9
1. Closures of critical bighorn sheep habitat, Needles District	9
2. Closures of relict areas, Needles and Maze Districts	9
3. Restricted use of the Doll House, Maze District	9
4. Restrictions on roads	9
H. DAY USE	10
1. Day use of vehicles and bicycles	10
2. Day hiking	10
3. Dayuseofpackandsaddlestock	11
I. COMMERCIAIUSE	11
J. EDUCATION	11
K. FACILITIES	12
1. Fires	12
2. Roads	12
3. Signs	15
4. Picnic Tables	15
5. Toilets and human waste	15
6. Hiking Trails	16
7. Trash and garbage cans	16
L. NOISE	16
M. OFF-SEASON USE	16

N. PETS	16
0. PACKANDSADDLESTOCKUSE	17
1. Pack and saddle stock in Horseshoe Canyon	18
2. Pack and saddle stock in the Orange Cliffs	18
3. Grazing permittees in the Orange Cliffs	18
P. TECHNICAL ROCK CLIMBING AND CANYONEERING	18
Q. VEHICLES	19
R. WATER USE	20
 III. MANAGEMENT ACTMTIES	21
A. CULTURAL RESOURCE PROTECTION	21
1. Site disclosure	21
2. Entering archaeological and cultural sites	21
B. EMERGENCY SERVICES	21
C. WILDERNESS ANDSOLITUDE	22
D. UPDATINGTHEPLAN	22
 IV. REFERENCES	23
 V. LISTOFPREPARERSI.....	25
 APPENDIX A: FINDING OF NO SIGNIFICANT IMPACT	27
APPENDIX B. THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS F O R T H E P L A NI.....	30
APPENDIX C. BACKCOUNTRY PERMIT RESERVATION SYSTEM	34
APPENDIX D. COMMERCIAL USE	35
APPENDIX E. DESIGNATED BACKCOUNTRY VEHICLE AND BACKPACK CAMPSITES	38
APPENDIX F. RESPONSE TO SUBSTANTIVE COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL ASSESSMENT	41

LIST OF TABLES

Table 1.	Total Number of Overnight Permits per Zone per Night	4
Table 2.	Zones with Designated Backpack Campsites	6
Table 3.	Regulations for At-large Campsite Selection	6
Table 4.	Maximum Group Sizes for Camping by District	8
Table 5.	Allocations for Areas with Restricted Day Use	14
Table B.1.	Numbers and Types of Commentors	32
Table B.2.	Type of Response	32
Table D. 1.	Total Number of Backcountry Permits Allocated to Commercial Vehicle and Bicycle Operations Per Day or Night	36
Table D.2.	Total Number of Overnight Permits Allowed for Commercial Backpack Concessionaires Per Night Per District	36
Table E. 1.	Designated Vehicle Campsites, Limits and Facilities	38
Table E.2.	Zones With Designated Backpacking Campsites (no facilities are provided)	40

LIST OF FIGURES

Figure 1.	Canyonlands Visitation by District, 1980-1991	1
Figure 2.	Map of Zone Boundaries, Day Use Areas, and Closures	Centerfold

I. INTRODUCTION

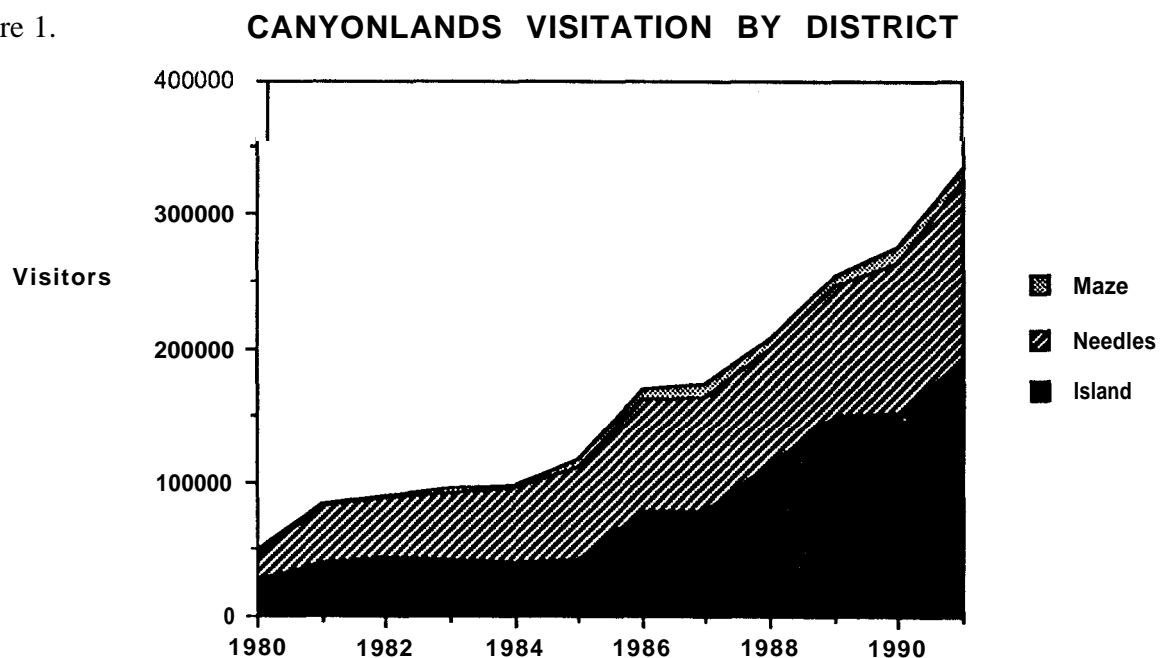
A. PURPOSE AND SIGNIFICANCE

Canyonlands National Park was established by Congress "to preserve an area . . . possessing superlative scenic, scientific, and archeological features for the inspiration, benefit, and use of the public . . ." (Public Law 88-590, 1964). The House of Representatives report accompanying this law describes Canyonlands: "Nowhere else is there a comparable opportunity to view a colorful, exciting, geologically significant wilderness from above, and then get down into its midst--and still not lose the atmosphere of remote wilderness. " (U.S. House of Representatives, 1964). Canyonlands' backcountry is significant as one of the last, large, relatively undisturbed areas of the Colorado Plateau.

Within the scope of the enabling legislation for Glen Canyon National Recreation Area, the Orange Cliffs Unit is to be "maintained as a critical backdrop for Canyonlands National Park and as a major vantage point for spectacular views into the park." The Orange Cliffs are to be managed "to maintain a relatively primitive, undeveloped atmosphere," and to provide "year-round access to Panorama Point" (U.S. Department of Interior, National Park Service, 1979).

Whether on foot, bicycle, or in vehicles, many visitors come to Canyonlands National Park to experience solitude and enjoy the natural beauty. Annual visitation to Canyonlands has quadrupled in recent years, from 105,646 in 1984 to 434,844 in 1993, and this trend is expected to continue (see figure 1). Of the 396,911 visitors entering Canyonlands in 1992, over 15,600 spent one or more nights in the backcountry. As a function of this rise in annual visitation, adverse impacts to Canyonlands' resources have increased and the opportunities to experience solitude have decreased. Since the mandate of the National Park Service (NPS) is to balance visitor access to the parks with preservation and protection of natural and cultural resources, rising visitation to Canyonlands has necessitated this new Backcountry Management Plan.

Figure 1.



B. PLANNING AREA DEFINED

The planning area is made up of three districts of Canyonlands National Park (337,570 acres): the Needles, Island in the Sky, and Maze districts, and the Orange Cliffs Unit (75,200 acres) of Glen Canyon National **Recreation** Area as far south as Clearwater Canyon (Figure 2). The total planning area comprises 412,770 acres. This plan does not cover the River District of Canyonlands, nor Glen Canyon Recreation Area beyond the Orange Cliffs.

This plan identifies backcountry management actions to address the problems affecting the three districts of Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area. The Orange Cliffs Unit is included in this plan because the area adjoins Canyonlands National Park, is similar in physiography, and is experiencing many of the same problems with growing visitation. Thus, to increase consistency and protection for visitors to both **the** Maze District of Canyonlands and the Orange Cliffs in Glen Canyon, the Orange Cliffs will be managed in the same manner as **the** Maze District, with the exception of mandated differences such as grazing in the Orange Cliffs.

C. BACKCOUNTRY DEFINED

Backcountry is defined as all land in the planning area except (1) two-wheel drive roads (paved or dirt surfaces) and their adjacent shoulders, ditches and culverts, (2) administrative buildings and their immediate surroundings, and (3) the Squaw Flat and Willow Flat Campgrounds. Backcountry includes all four-wheel-drive roads, and the Shafer Trail below the Shafer day use parking area.

D. THE PLANNING PROCESS AND NEPA

This plan was prepared in full compliance with the National Environmental Policy Act (NEPA) (Public Law 91-190, 1969) and its implementing regulations (40 CFR Parts 1500- 1508). Thirty-eight issues and concerns were identified by the public and park staff to be addressed by the planning effort. Visitor activities and management solutions to address these issues follow. Visitor activities not otherwise mentioned, such as fishing, will continue according to existing policy. Appendix B describes the steps taken to follow the NEPA process. Existing and new regulations included in **this** plan are according to Title 36 of the Code of Federal Regulations (36 CFR).

II. VISITOR ACTIVITIES AND MANAGEMENT SOLUTIONS

A. ZONING

The backcountry of each district has been divided into zones, with a number of backcountry use permits per night set for each zone. Zone boundaries are illustrated in Figure 2 and zone permit allocations are listed in Table 1. Vehicle and bicycle parties will camp at designated campsites. Camping for backpacking will either be at-large or designated, depending on the zone. See CAMPING below for details on overnight stays in the backcountry.

Backcountry zones were defined based on fragility and uniqueness of resources and recreational opportunities, historic and projected visitation, importance to visitors, and potential ranges of visitor experiences. Initially 66 zones were identified in the draft plan. The public indicated that these 66 separate zones were hard to locate in the field, too complicated, and too confusing. The staff indicated that **these** zones were so small that they forced visitors into areas **they** had no desire to visit. Consequently the zone boundaries have been consolidated into 19 zones. With these larger zones, visitors can travel to preferred destinations within zones without impacting non-target areas.

Since zoning provides the crux of the solution to backcountry management problems, visitor impacts will be monitored to ensure that park resources are not damaged as a result of changes in use patterns, or **that** visitors do not have consistently unsatisfactory experiences due to crowding or other negative social interactions. If this occurs, zone boundaries will be altered.

B. RESERVATION AND PERMIT SYSTEM

Backcountry use permits are required for all overnight stays in the backcountry, day use of pack and saddle stock, and vehicle day use in Salt Creek and Horse and Lavender Canyons. Due to the limited number of permits available for most of these activities, a reservation system will be available. Reservations for backcountry use permits will begin in January 1995. Fees will be charged to offset administrative costs. See Appendix C for information on the reservation system. Permits will no longer be required for technical rock climbing (see TECHNICAL ROCK CLIMBING AND CANYONEERING below).

C. AIRCRAFT AND OVERFLIGHTS

The Federal Aviation Administration advises pilots to maintain an altitude of at least 2000 feet above ground level over all national parks. Noise from low flying aircraft adversely impacts both wildlife and park visitors. Ground level or ground surface is defined as the highest terrain within 2,000 feet laterally and vertically of the flight route at all times. Powerless flights (e.g. gliders, hang gliders, paragliders, etc.) are prohibited.

Table 1. Total Number of Overnight Permits per Zone per Night

ZONE NAME	# OF BACKPACK PERMITS	# OF VEHICLE PERMITS
ISLAND DISTRICT TOTAL	14	20
Day Use Area	0	0
White Rim	0	19
Taylor Canyon	4	1
Syncline	1*	0
Upper West Basins	3	0
Lower Basins	2	0
Gooseberry / Lathrop	3	0
Murphy Point	1	0
NEEDLES DISTRICT TOTAL	34	12
Day Use Area	0	0
Davis & Lavender	2	0
Upper Salt	4*†	0
Salt & Horse	4	2
Butler / West Side Canyons	2	0
Red Lake / Grabens	5	10
Needles Trails	16*	0
Needles North	1	0
MAZE & ORANGE CLIFFS TOTAL	15	20
Maze Area	11	11
Orange Cliffs	1	3
High Spur	3	6
CANYONLANDS & ORANGE CLIFFS TOTAL	63	52

* These **backpack** areas have designated campsites, all other zones have at-large camping

† 6 sites may be designated for 4 permits to facilitate travel plans.

D. BICYCLE USE

Bicycles are classified as vehicles so all regulations applying to motor vehicles apply to bicycles. Bicycles are allowed on all roads designated as open to vehicular traffic. Lights are required for night-time use of bicycles. Bicycles are not allowed on hiking (foot) trails.

E. CACHES

Caching water and food supplies for extended backcountry trips will be allowed in Canyonlands **with** written permission of the district ranger and as stipulated on the backcountry permit. No damage to resources, such as burying, will be allowed in securing a cache. The date the cache will be collected and the name and address of the owner must be clearly visible on the cache. If the cache is not picked up within 30 days of the ending date of the backcountry permit or the date on the cache, park rangers will bill the owner for cleanup costs and issue a violation notice and fine for abandoning property.

F. CAMPING

1. Permits and reservations

All overnight uses of the backcountry require a backcountry use permit. Permits will be available by advance reservations. Any unallocated visitor use permits remaining in a zone or any canceled permits will be available to visitors walking into district visitor centers on a first-come, first-served basis. See Appendix C for information. The maximum stay per permit is 14 nights. Overnight use in **the** backcountry will be within the minimum impact regulations and restrictions listed in Table 3.

2. At-large and designated campsites

Camping is either ***at-large***, or ***in designated campsites***, as defined below. See Table 1 and Figure 2 for at-large or designated-campsite zones.

Designated cammmites. A designated campsite is one for which boundaries or perimeters are delineated with four wood posts by NPS staff. All vehicle and bicycle overnight camping is at designated campsites. Appendix E contains a list of all designated vehicle campsites. Backpack camping is designated in some zones; see Table 2. **In** zones where campsites are designated for backpackers, and for all vehicle and bicycle campers, backcountry users may not select at-large campsites but must use designated sites. In designated campsites, sleeping and cooking areas must be within the NPS-delineated perimeters.

Campsites are designated to keep intensive use to previously disturbed areas, to clarify locations where camping is acceptable, or to limit adverse impacts to resources and other campers. Also, traditional designated vehicle campsites that had been located in flood plains have been closed for increased visitor safety as directed in Executive Orders 11988 and 11990. The former camping areas that are now closed

were all located in Salt Creek in the Needles District: Bates Wilson Camp (one site), Angel Arch Camp (two sites), and the three creek-level campsites at Peekaboo. The two upper Peekaboo campsites will remain open. Three new campsites have been opened on the four-wheel drive roads behind Elephant Hill to **accommodate** visitors displaced by this closure. A few administrative campsites may be established to facilitate backcountry ranger patrols, park maintenance, resource management and administrative use.

Table 2. Zones with Designated Backpack Campsites

DISTRICT	ZONE NAME	NUMBER OF CAMPSITES
Island in the Sky	Synchrone	1
Needles	Needles Trails	16
Needles	Upper Salt	4*

*Six campsites may be designated to facilitate travel, but only four overnight permits will be issued on any one night.

Table 3. Regulations for At-large Campsite Selection

<p>At-large Campsites must be:</p> <ul style="list-style-type: none"> - 300 feet from water sources, including seeps, potholes, springs, and streams; the Green and Colorado Rivers are exceptions - 300 feet away from all prehistoric or- historic cultural sites, including alcoves, rock art, surface scatters of lithics or ceramics, partial or complete structures or ruins - at least one mile from trail heads or roads (including four-wheel-drive roads) - within the zone for which the permit was issued - in areas open to at-large camping - left with the least possible evidence of use and the least possible environmental degradation - accessed by the least impacting route, i.e, visitors should use washes or rock surfaces to reach campsites - selected on rock surfaces, previously disturbed areas, or surfaces without cryptobiotic soil crusts or vegetation
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At-large campsites. In zones where campsites have not been designated, backpackers may choose their own campsites. This is referred to as at-large camping. At-large campsites will be selected by campers based on the minimum impact camping regulations in Table 3. The former regulation requiring campers to be out of sight and sound of the trail has encouraged off-trail travel and resource damage; consequently, this regulation has been eliminated. Vehicle campers may not camp at-large.

3. Number of nights campers may remain in a zone

A backcountry camper may spend up to seven consecutive nights per zone in the Needles and the Island in the Sky districts. Due to the large size of the Maze District zones and the difficult logistics, a backcountry camper may spend ten consecutive nights per zone in the Maze District. After seven nights in a Needles or Island in the Sky zone, campers must move to another zone. After ten nights in a Maze or Orange Cliffs zone, campers must move to another zone. A backcountry use permit may be issued for up to 14 consecutive days.

4. Overnight parking

Overnight parking is allowed at designated trailheads or in designated campsites. Parking vehicles at other locations along designated roads is allowed, but the location must be written on the backcountry use permit. Vehicles must be parked off of the road surface no further than necessary to allow another vehicle to pass. Drivers must choose a parking location which damages the least amount of vegetation and soil. Use of existing pull-outs and parking areas is encouraged.

Overnight parking in the Salt Creek/ Horse Canyon Zone is allowed only at Peekaboo and the Upper Salt trailhead parking areas (located at the former Angel Arch camping area).

5. Group size

Backpacking group sizes. Maximum backpack **camping group size is seven people in the Island in the Sky and Needles Districts, and five in the Maze District and Orange Cliffs Unit.** See Table 4 below. When larger groups split up to meet the group camping size limits, each subgroup must be equipped as a self-sustaining group. Each division of a larger group must have the ability to treat their own water, cook their own food, etc., and must camp at least one mile apart from other divisions of the group in **at-large** camping zones, or at different sites in the designated campsite zones. At **this** time, there are no limits to group size for day users; groups that have split up to camp may come together for daytime activities.

Vehicle camping group sizes. Three vehicles per group are allowed in all designated vehicle campsites in all districts. The maximum number of people per vehicle campsite is 15 in the Island in the Sky, ten in the Needles, and nine in the Maze and Orange Cliffs. One campsite, Flint Seep in the Orange Cliffs Unit, is a group site that holds up to 16 people and five vehicles to facilitate use by larger groups. See Table 4 below.

The permitted group size varies by zone to provide a range of alternative social experiences, to manage for differing levels of resource sensitivity, and to **accomodate** trip logistics. Group size for backpackers and vehicle campers in the Maze and Orange Cliffs is smaller than in the other districts to provide for the greatest solitude and the most remote camping experience in **the** planning area. This mandate for the Maze district is spelled out in the 1978 General Management Plan which directs that the Maze be managed as “a rugged wild area with remoteness and self-reliance the principal elements of the visitor experience. ”

Table 4. Maximum Group Sizes for Camping by District

DISTRICT	VEHICLE CAMPSITES	BACKPACK CAMPING
Island	15 people, 3 vehicles	7 people
Needles	10 people, 3 vehicles	7 people
Maze and Orange Cliffs	9 people, 3 vehicles 16 people, 5 vehicles at Flint Seep Group Site	5 people

6. Vehicle and bicycle camping

All campsites for vehicle and bicycle camping are designated campsites as described above. This includes the Orange Cliffs Unit. Locations of designated vehicle and bicycle campsites within each of the zones are shown in Figure 2. Maximum stay at a campsite is three (3) nights. See also Overnight Parking, above.

7. Areas closed to camping

The following areas are closed to camping (see Figure 2):

- Day use zones in the Island in the Sky and Needles Districts, except in the Squaw Flat and Willow Flat campgrounds.
- Zones with designated backpack campsites.
- Areas below and visible from the Maze Overlook.
- Pete’s Mesa.
- Horseshoe Canyon.
- ‘Areas closed to entry (Virginia Park, Jasper Canyon and the critical bighorn sheep habitat in the Needles District - see CLOSURES below).

G. CLOSURES

1. Closures of critical bighorn sheep habitat, Needles District

Lower Big Spring and Lower Little Spring Canyons, Lower Salt Creek, and Lower Elephant Canyon will be closed to all human entry from May 1 to September 1. See Figure 2 for boundaries. These canyons are important desert bighorn sheep habitat, but the canyons are especially narrow with little escape terrain for bighorn sheep. The bighorn sheep population in the Needles District is declining, with only an estimated 40 sheep remaining. Lamb survival has been minimal with only one to two lambs surviving per year for the past two to three years. The closure is intended to minimize disturbance to lambs. If the bighorn population recovers, this closure will become less restrictive.

2. Closures of relict areas, Needles and Maze Districts

Relict areas in Canyonlands National Park and Glen Canyon National Recreation Area are defined by the Nature Conservancy as “small places with pristine plant communities... where topography has kept out motor vehicles and livestock grazing” (Van Pelt et al., 1992). Since there are so few of these areas in the arid west, preservation of the few remaining relict areas allows biologists to assess the impacts of human activity on native biota. Unfortunately, even trampling by visitors can alter the biota.

Jasper Canvon (Maze District). Entry into Jasper Canyon from the Green River is allowed for the first quarter mile (to the Jump). Entry for non-scientific uses is prohibited beyond this point. Views into Jasper Canyon will be possible from many locations along the canyon rim.

Virginia Park (Needles District). The grasslands of Virginia Park (approximately 203 acres) will be closed to all non-scientific entry. Views into Virginia Park will still be possible from rock formations around the grasslands. At least once a year the NPS will conduct a guided tour of Virginia Park for all interested members of the public. Wash bottoms and rock will be used as travel routes.

Scientific research in Virginia Park and Jasper Canyon may be conducted only after receipt of a written research permit.

3. Restricted use of the Doll House, Maze District

To reduce impacts from trampling and multiple trailing, only designated trails may be used when hiking from the river through the Doll House area of the Maze District. Trail marking will be upgraded to facilitate use of designated trails. Backcountry permits are required for overnight stays in this area.

4. Restrictions on roads

For information on road closures and restrictions, see the section on roads under FACILITIES, below.

H. DAY USE

Day use permits are required for all pack and saddle stock use, and for those backcountry roads with day use limits (the Salt Creek and Horse Canyon area and Lavender Canyon). For an explanation of these roads, see “Roads” in the section on FACILITIES, below. Where day use permits are limited in number they will be available through the advanced reservation system. See Table 5 below for the limits.

Regulations or restrictions of day use may be implemented where logistical problems develop (for example, where parking is limited or unsafe numbers of vehicles are using one-lane roads). Additional rules may also be imposed if significant resource damage occurs as a result of unregulated day use. Future planning efforts will address the impacts of day use on park resources.

1. Day use of vehicles and bicycles

Numbers of day users in vehicles and on bicycles will not be limited, except as shown in Table 5 below. Vehicles and bicycles must stay on NPS designated roads at all times. Hiking trails are not open to bicycle use.

2. Day hiking

Numbers of day hikers and size of hiking groups will not be restricted except in Horseshoe Canyon (see below). Day hikers are encouraged to stay on designated trails or roads at all times. Foot travel through areas without trails should be in wash bottoms and on rock surfaces to avoid damaging vegetation and soil crusts. Parking for day hiking is available at trailheads. When necessary, vehicles may also be parked along backcountry roads. Vehicles should be pulled off the roadway just far enough to allow another vehicle to pass. Drivers should choose a location which damages vegetation and soil crusts to the least degree possible. Use of existing pull-outs and parking areas is encouraged.

Horseshoe Canyon. Overnight camping is prohibited in Horseshoe Canyon. Guided tours will be offered during the high use season and a ranger will continue to be stationed at the canyon. Barriers will be installed to keep visitors from inadvertently damaging rock art. Interpretive displays at the west rim parking area will be available. When staffing levels permit, entry to Horseshoe Canyon will be by guided tour only.

The maximum group size for private parties hiking through Horseshoe Canyon will be 20 people. Private groups larger than 20 may arrange for a special guided walk, or must break into smaller groups. Special guided walks may be arranged with the Maze District staff or **through** the Park Archaeologist.

Horseshoe Canyon was added to Canyonlands National Park to help preserve and protect four magnificent and irreplaceable prehistoric Native American rock art panels. While deliberate vandalism has been rare since the rock art was added to the park, unintentional damage from visitors touching it and stirring up dust and silica particles has increased in direct proportion to the number of visitors. Smaller group sizes will reduce the amount of silica and dust impacting the sites.

3. Day use of pack and saddle stock

All pack and stock users must obtain a backcountry use permit for day use. Day use permits are unlimited and free of charge, except in Salt Creek, Horse Canyon and Lavender Canyon (see Table 5), where day use is limited to seven (7) animals per day. In these areas, permits are available through the reservation system and a fee is required. In all other areas of the park, including Horseshoe Canyon, group sizes are limited to ten (10) animals and ten (10) people per party.

See PACK AND SADDLE STOCK USE for other regulations.

I. COMMERCIAL USE

A commercial trip or operation is defined as a trip where actual costs are not shared equally by all participants, profit is a goal of the trip, or there is public advertising for participants. Commercial use is regulated according to the mode of transportation used in the backcountry. Definitions, regulations, and the specifics for managing commercial use are outlined in the Commercial Visitor Services Management Plan for Arches National Park, Canyonlands National Park and Natural Bridges National Monument. All commercial operations must have authorization from the Superintendent of the park(s) in which operations will take place, prior to offering any services in the park. Those commercial operations which extend into **both** Canyonlands and Glen Canyon must be authorized by the Superintendent of Canyonlands, subsequent to **the** agreement of the Superintendent of Glen Canyon. See Appendix D for regulations and use allocations specific to commercial uses. Commercial operations (park concessionaires) in existence have been determined to be necessary to provide the opportunity for some visitors to enjoy the park in a way they are not prepared to accomplish on their own.

J. EDUCATION

Education is a very important tool in managing backcountry use. Public education is used to reduce impacts and encourage compliance with park regulations. A variety of means will be used to heighten visitors' knowledge of minimum impact use of both front country and backcountry. Some of the educational strategies to be implemented are listed below.

- New exhibits in the visitor centers at Needles (1995), Island in the Sky (1993), and Bullfrog educate visitors on the protection of park resources while interpreting the region's natural and cultural history.

- New wayside exhibits located primarily at the trailheads in the Needles will stress protection of cryptobiotic soil crusts and cultural resources.

- Canyonlands National Park plans to revise or replace, based on availability of funding, the current minimum-impact video, making the program more specific to the regulations and policies of backcountry travel in Canyonlands.

-Canyonlands National Park will reinstitute an NPS visitor newspaper with sections on resource protection and backcountry use.

-A review of all current literature offered to park visitors will be conducted to determine if messages can be strengthened.

-Rangers will continue to personally issue backcountry permits and require backcountry parties to be familiar **with** policies and regulations. The expansion of the backcountry reservation system will allow communication of more information to visitors prior to their trip so they will arrive better prepared and with a clearer understanding of park rules and regulations.

-A new "Guide to Canyonlands National Park" (sales item) is being planned for 1996 by Canyonlands Natural History Association that will emphasize appropriate use and protection of features.

-Permit talks are given to backcountry groups prior to departure.

Other measures to educate visitors will be implemented as needed.

K. FACILITIES

1. Fires

Open wood fires are prohibited, and wood collecting is not allowed anywhere in the park. Fire grates will not be provided in the backcountry. Charcoal fires will be allowed at designated vehicle campsites only if visitors bring in and use fire pans. Users must pack out **fire** pans and all ash and charcoal. During periods of high fire danger, fire pans and charcoal fires may be prohibited. Beach campfires are not allowed by any backcountry permittee under this Backcountry Management Plan. Beach campfires of river runners are regulated by the River Management Plan.

Wood supplies are limited in Canyonlands and Orange Cliffs; trees grow slowly and are sparsely distributed. In regularly used areas, campfire burning can eliminate wood faster than it can be replaced by new growth. Both living trees and dead wood provide shade and shelter for many animal species as well as organic matter for the soil. The prohibition on wood fires will maintain the availability of these essentials.

2. Roads

Closures. The **Murphy Point Road** in the Island in the Sky District will be closed to vehicle traffic at the current trailhead. The closed portion of road (approximately one half mile) will become a hiking trail. **There** are few hiking opportunities in the Island in the Sky District that do not involve a strenuous climb down or up the **Wingate** cliffs. Closure of this segment of road will allow for an additional **mesa-**top hiking opportunity, and provide the only backpack camping on the Island in the Sky mesa top.

The Cyclone Canyon Road in the Needles District will terminate at the designated vehicle campsite. The closed portion of the road (approximately three and one half miles) will become a hiking trail. This road closure eliminates a section of road that has been scheduled for closure since the adoption of the 1978 General Management Plan. A parallel road in the adjacent Devil's Lane **graben** provides scenery and driving terrain similar to that in Cyclone Canyon, and the campsite located at the new end of the Cyclone Canyon road will be one of the most remote and isolated vehicle campsites in the Needles District.

Davis Canyon in the Needles District will be closed to vehicle traffic at the park boundary. The closed portion of the road (approximately three miles) will be open to foot travel. A designated parking area and vehicle turn-around will be established within the park boundary. This newly converted foot trail will provide the only designated hiking trail in the larger drainages on the eastern side of the Needles District where hikers can enjoy a canyon without vehicle traffic. In addition to providing undisturbed hiking opportunities, the road closure will allow the natural resources to recover from the impacts of **off-road** parking, and improve the setting at the cultural sites in the canyon.

The 0.5 mile segment of **the Salt Creek Road** in the Needles District from the junction with the Angel Arch spur road to the Bates Wilson Campsite will be closed to vehicular traffic. With the removal of Bates Wilson Camp, this segment of road is no longer necessary. A parking area is available at the former Angel Arch Camp for access to **the** Upper Salt zone and foot trail. There will be more parking available at this location than at the former trailhead south of Bates Wilson Camp.

Roads with limited access. **Salt Creek and Horse Canyon** four-wheel drive roads in the Needles District will remain open to vehicular traffic, but travel will be by backcountry use permit only. A locked gate at the north end of the road (the location of the current gate) will control access. Day use permits for Salt Creek and Horse Canyon will be limited to ten (10) permits for private motor vehicles (one vehicle per permit), two (2) permits for commercial motor vehicle tours (one vehicle per permit), one (1) or more permits for up to seven (7) private or commercial bicyclists, one (1) or more permits for up to seven (7) pack or saddle stock. See Table 5 below. All permits are available through the advance reservation system (see Appendix C). Unreserved permits or cancellations will be 'available to walk-in visitors.

Overnight use in vehicle campsites in the Salt Creek drainage will continue to be allowed at two Peekaboo campsites located on a bench out of the flood plain. All other campsites in the Salt Creek drainage were located in the floodplain and have been removed (see CAMPING above).

Visitors with backcountry use permits for Peekaboo campsites do not need day use permits for the Salt Creek and Horse Canyon area. Hikers with backcountry use permits for the Salt Creek and Horse Canyon or **the** Upper Salt zones may have vehicle access to Salt Creek and Horse Canyon as well, but overnight parking is only permitted at the Peekaboo camp or the Upper Salt trailhead parking (at the former Angel Arch camp).

Limiting the volume of traffic will begin to protect riparian and archeological resources in this ecologically and culturally important area. A monitoring program will be initiated to evaluate the effectiveness of this action.

Lavender Canyon in the Needles District will be gated at the park boundary. Day use permits will be issued to a limited number of vehicle, bicycle and horse users for day access into the area. This will provide an opportunity for park staff to educate visitors about resource concerns and to protect this special visitor experience from unlimited numbers.

Permits for day use in Lavender Canyon will be limited to eight (8) private motor vehicles (one vehicle per permit), two (2) commercial motor vehicles (one vehicle per permit), permits for up to seven (7) private or commercial bicyclists, and permits for up to seven (7) pack stock or saddle animals. See Table 5 below. All permits will be available through the advance reservation system (see Appendix C). Unreserved permits or cancellations will be available to walk-in visitors.

Backcountry roads will continue to be subject to seasonal and periodic closures due to flash floods, quicksand, ice, and other adverse driving conditions. These roads may be closed at the discretion of the District Ranger. Reservation fees are not refunded. Costs of towing vehicles due to breakdown or getting stuck are high due to the remoteness of the area and will be borne by the operator of the vehicle.

Table 5 Allocations for Roads with Restricted Day Use

AREA	PRIVATE VEHICLES PER DAY	BICYCLES PER DAY	PACK AND SADDLE STOCK PER DAY	COMMERCIAL VEHICLE USE PER DAY
Salt & Horse Canyon zone	10 vehicles	7 bicycles (private or commercial)	7animals	2 vehicles
Lavender Canyon	8 vehicles .	7 bicycles (private or commercial)	7animals	2 vehicles

Road maintenance. Defined levels of road maintenance will be addressed in a written maintenance plan. The goal of road and trail maintenance is to perform the minimal maintenance **necessary** to keep the roads and trails safe and passable, and to minimize resource damage caused by multiple trailing due to impassable or unrecognizable trails.

3. Signs

Signs may be used to give directions and distances to major features, provide information, educate visitors, mark campsites and toilet facilities, and delineate closures or restrictions for resource and visitor protection. Directional signs are maintained at strategic points such as trail junctions to facilitate travel on backcountry trails. Trailhead signs or bulletin boards will be installed as needed for resource and visitor protection. Register boxes and/or interpretive signs may be placed in the backcountry to help protect sensitive resources such as relict areas and cultural sites.

4. Picnic tables

Picnic tables are provided at the Lathrop Canyon day use area in the Island in the Sky District and at all vehicle campsites in the Needles District.

5. Toilets and human waste

Toilets are provided along backcountry roads at heavily used day use locations as well as at designated campsites in the Island in the Sky and Needles districts.

Toilets are not provided in the Maze and Orange Cliffs because of the difficulty of pumper-truck access and of servicing dehydrating, composting, or other toilet systems in remote locations. Campers at vehicle campsites in the Maze and Orange Cliffs will be required to carry out solid human waste in a portable toilet system. Toilet systems are available through boating and RV supply stores and companies in gateway towns are renting new portable toilets to users who may not want to purchase their own.

Where toilets are not provided and carry out is not required, solid human waste will continue to be buried in "catholes. " A **cathole** should be a small hole excavated 6 to 8 inches deep and at least **300** feet from water sources (including seeps; potholes, springs, streams, and the Green and Colorado Rivers), potential water sources (arroyos or dry washes), archeological or historical sites, alcoves or rock shelters, and campsites. Used toilet paper, feminine hygiene products, diapers, or any other paper product must be carried out of the park in a sanitary manner, such as bagged in self-sealing plastic bags. Burning toilet paper is prohibited.

In frequently used backcountry campsites, human waste is not only an aesthetic issue, but can result in unacceptable resource impacts and public health problems. If this plan does not adequately resolve the human waste problems in the backcountry with smaller group sizes and limited numbers of permits, other solutions or further restrictions may be required. Maintained backcountry toilets in the Needles and Island in the Sky districts may be phased out in the future and portable toilets may be required to be carried. When a fail-proof backpacker version of a human waste container is developed, these too may be required for backpack use.

6. Hiking trails

All designated hiking trails will remain open. The segments of roads that have been closed will become hiking trails. Defined levels of trail maintenance will be addressed in a written maintenance plan.

7. Trash and garbage cans

Backcountry users must pack out all trash and garbage (including toilet paper as discussed above). Garbage cans are not provided. Trash and garbage may not be deposited in backcountry toilets. Trash deposited in vault toilets prevents them from being pumped.

L. NOISE

Camp activities may not be heard outside of the campsite. At no time should audio devices be audible outside of a vehicle or campsite. Quiet hours are from 10 P.M. to 6 A.M. local time. Operation of generators in the backcountry is not permitted. An exception may be made for generators needed for medical purposes if prior approval of the District Ranger is obtained. Additional National Park Service noise regulations are listed in 36 CFR 2.12.

Utah traffic codes prohibit excessive or unusual motor vehicle noise. Every motor vehicle is required to have a muffler or other effective noise-suppressing system in good working order and in constant operation.

M. OFF-SEASON USE

Currently, backcountry overnight visitation is seasonally variable, with the highest use in spring and fall. With implementation of this plan, and with projected increases in visitation, limits on user nights will likely be reached in spring and fall. Currently, off-season use (January, February, July, August, and December) is approximately 21 percent of total backcountry use. If user nights in the off-season rise to more than 25 percent of the total backcountry use, this plan may be altered to retain an off-season period by limiting use in those months.

Most use in the winter is comprised of the same activities that take place other times of the year. Rules for these activities, such as driving a motor vehicle, apply in all seasons. Activities unique to winter follow the same general guidelines as other uses. Cross-country skiing is allowed both on and off-trail; however, the use of hiking trails, roads, or wash bottoms is encouraged to prevent resource damage and for visitor safety.

N. PETS

- All pets are prohibited in the backcountry of Canyonlands N.P.
- Pets must be on a leash in the Orange Cliffs Unit of Glen Canyon N.R.A.
- Pet waste is subject to the same restrictions and removal/treatment as human waste in the N.R. A.
- Pets may not be left unattended, tied, or physically confined in the front country to facilitate backcountry travel.
- Guide or assistance dogs accompanying a visually or hearing impaired person are not considered pets and are not prohibited.

0. PACK AND SADDLE STOCK USE

-Horses, mules and burros are the only animals considered pack and saddle stock. Llamas and goats are prohibited by Superintendent's Directive due to the possibility of disease transmission to native animals, especially desert bighorn sheep. If evidence appears in the future showing disease(s) transmitted from other pack and saddle stock is a threat to native wildlife, these regulations may be revised. This may result in restricting pack and saddle stock from certain areas or eliminating all use from the park.

-All pack and saddle stock users must obtain a backcountry use permit, either for day use or camping. Day use permits are unlimited and free of charge, except in Salt Creek, Horse Canyon and Lavender Canyon in the Needles District. In these areas of limited day use, and for all overnight stays in the backcountry, permits are available through the reservation system, and there is a fee associated (see Appendix C for reservation information).

-Group sizes are limited to 10 people and 10 animals for day use, except in the following areas. In Salt Creek, Horse Canyon, and Lavender Canyon, day use is limited to seven (7) animals per day. (See Table 5.)

-Group size for overnight use is seven (7) people and ten (10) animals in the Needles and Island in the Sky Districts, and five (5) people and eight (8) horses in the Maze and Orange Cliffs areas.

. -Day use of pack and saddle stock is allowed on all backcountry roads.

-Overnight use by pack and saddle stock is allowed at all backcountry vehicle campsites. If sanitation or safety problems develop, this policy may be modified.

-At-large camping with stock is not permitted.

-Cross country travel is not permitted, except in a portion of the Orange Cliffs as described below.

-All pack and saddle animals are required to be fed pelletized feed for 48 hours in advance, of and for the duration of the trip to prevent the spread of exotic plant species. Park vegetation may not be consumed.

-All manure and feed must be removed from the campsite and packed out.

-Pack and stock animals may not be left unattended. They must be staked away from water sources (at least 300 feet) and away from vegetation where possible, and may not be **unstaked** and hobbled.

-Commercial use of saddle and pack stock is no longer allowed (see Appendix D).

1. Pack and saddle stock in Horseshoe Canyon

The west side hiking trail in Horseshoe Canyon is open to pack and saddle stock day use. A backcountry use permit is required. Ten (10) horses per party is the maximum group size. Saddle and pack stock must remain in the wash and are limited to the area from the bottom of the road and foot

trail, to one-half mile south of the Great Gallery. Upstream from there, where the wash bottom is impassable in places, stock users will be permitted to travel on the foot trail. To reduce the potential for damage from dust and silica particles, pack and saddle stock may not approach the rock art. Hitching posts will be provided at locations that allow visitors access to viewing the rock art. If saddle and pack stock use increases to the point of threatening the rock art or creating safety problems, this activity will be curtailed in the canyon.

2. Pack and saddle stock in the Orange Cliffs

An exception to the policy for pack and saddle stock will be the Orange Cliffs mesa top area above 6,000 feet, where grazing allotments are active. In this area, cross country travel and at-large overnight camping with saddle and pack stock will be allowed. The weed-free feed policy will be in effect. A backcountry use permit will be required for day and overnight use. Day use permits are unlimited in number and free of charge. Overnight pack and saddle stock users need an at-large backpacking permit which is available through the reservation system (see Appendix C). Group size will be limited to five (5) people with eight (8) animals for overnight use. (Five people corresponds to the overnight group size for backpack camping). All camping regulations for at-large backpack camping will apply. In addition, during travel or where animals are tethered, manure must be scattered, keeping it at least 300 feet from water sources.

3. Grazing permittees in the Orange Cliffs

The regulation of ranching operations by current grazing permittees does not fall under the scope of this plan. Grazing permittees are exempt from certain regulations that may hinder their operations: dogs may be in the backcountry and off leash to work cattle, numbers of horses and riders involved in managing livestock are not limited, and camping may occur within Glen Canyon National Recreation Area in locations and group sizes necessary for grazing operations. Only holders of current grazing permits are included in these exceptions. All stipulations of the grazing permits apply.

P. TECHNICAL ROCK CLIMBING AND CANYONEERING

Technical rock climbing is defined as ascending or descending a rock formation utilizing rock climbing equipment.

Canyoneering is defined as cross country travel involving occasional ascending or descending a rock formation utilizing rock climbing equipment.

Permits are not required for rock climbing or canyoneering; however, if the climbing or canyoneering is overnight, then a backcountry use permit is required and the climbers or **canyoneers** are subject to all provisions for minimum impact camping. The number of available overnight permits will be subject to the total available for the backcountry zone where the overnight stay occurs.

-Climbing and **canyoneering** within Canyonlands National Park and the Orange Cliffs Unit shall be either

free climbing or clean aid climbing, except as described below.

- No new climbing hardware may be left in a fixed location; however, if an existing bolt or other hardware item is unsafe, it may be replaced. This will limit all climbing to existing routes or new routes not requiring placement of fixed anchors.

- Protection may not be placed with the use of a hammer except to replace existing belay and rappel anchors and bolts on existing routes, or for emergency self-rescue.

- If an existing software item (sling, runner etc.) is unsafe, it may be replaced.

- Software that is left in place shall match the rock surface in color.

- The intentional removal of lichen or plants from rock is prohibited.

- The physical altering of rock faces such as by chiseling, glue reinforcement of existing holds, and gluing of new holds is prohibited.

- The use of motorized power drills is prohibited.

- Technical rock climbing is prohibited in the following areas:

- the Salt Creek Archeological District of the Needles District

- the detached Horseshoe Canyon Unit of the Maze District

- on any arch or natural bridge named on the United States Geological Survey 1:62,500 topographic map of Canyonlands National Park and Vicinity, with the exception of Washer Woman Arch

- Rock climbing, ascending, descending, or traversing an archeological site or cultural resource is prohibited. Canyoneering may occur in locations closed to rock climbing, but must occur at least 300 feet away from archeological or cultural sites.

These requirements are established to minimize alteration of the rock formations and rock art of Canyonlands and Orange Cliffs. Free climbing and clean aid climbing are minimum-impact approaches which employ stoppers, nuts and friends, rather than pitons or bolts, for protection or direct support. These are climbing aids which are removable and do not damage the rock.

Q. VEHICLES

- All motorized vehicles (including motorcycles) must abide by Utah State licensing requirements for highway travel and NPS rules and regulations.

- All-terrain vehicles (ATVs) are not permitted in Canyonlands National Park.

- Numbers of vehicle travelers and bicyclists, and the sizes of these groups, will not be restricted at this time, except as listed in restrictions elsewhere in this document.

- Vehicle travelers and bicyclists are required to stay on designated roads at all times.
- Travel is not allowed on roads posted as closed or roads with barriers of logs or rocks at the entrance.
- Travel is not allowed on hiking trails or foot trails.
- When yielding to oncoming traffic or parking, vehicles may be pulled off of the roadway just far enough to allow another vehicle to pass. Drivers should choose a location which damages vegetation and soil crusts to the least degree possible. Use of existing pull-outs and parking areas is encouraged.
- All areas of the backcountry outside the road corridors are proposed wilderness. In keeping with wilderness mandates, and to be consistent with wilderness management policies of the NPS, possession of bicycles or mountain bikes (mechanized means of travel) off roads, on hiking trails, or out of developed campsites is prohibited. See also sections on Camping and Roads, above.

R. WATER USE

Water-sources are scarce in this desert environment, yet vital to all forms of life. The following regulations for human use of water help to protect the water sources for all:

- All campsites, unless designated by the NPS, must be at least 300 feet away from water sources (including seeps, potholes, springs, and streams; the Green and Colorado Rivers are exceptions).
- Saddle and pack stock must be staked at least 300 feet from water sources where possible.
- Only biodegradable soaps may be used, and they must be used at least 100 feet away from water sources, with the exception of the Green and Colorado rivers.
- Swimming, bathing, and immersing human bodies in water sources is prohibited (except in the Green and Colorado Rivers and the section of Salt Creek that is open to vehicle use).
- Rinsing dishes or other equipment directly in water sources is prohibited, except in the Green and Colorado Rivers.
- A water source may not be emptied or depleted for human use.

III. MANAGEMENT ACTIVITIES

A. CULTURAL RESOURCE PROTECTION

1. Site disclosure

Many of the archeological (including historical) sites within Canyonlands and the Orange Cliffs Unit have a long history of visitor use. In fact, the park was established partly to ensure public access to sites. However, both the National Historic Preservation Act (Public Law 89-665, 1966) and the Archeological Resources Protection Act (Public Law 96-65, 1979) mandate that the NPS only disclose site locations if no harm, theft or destruction will result from disclosure. To comply with these laws, park staff may provide locational information only to sites which are regularly patrolled, monitored, stabilized, or otherwise protected from visitor impacts or harm. (Canyonlands Superintendent's Directive 1993 H-1 contains the details of the Cultural Site Information Disclosure Policy.) Visitors are welcome to explore the backcountry and locate archaeological and cultural sites; however, archaeological sites may not be entered.

2. Entering archaeological and cultural sites

The Code of Federal Regulations (36 CFR 2.1 (a)(5)) states that archaeological and cultural sites may not be entered by visitors. This means visitors may not go inside structures or human-made enclosures, whether prehistoric, protohistoric, or historic. Visitors may approach outside walls on structural sites, but they may not go inside structural walls or enclosures. These sites are often fragile, and much of their educational and scientific value can be lost if they are damaged.

The boundaries of an archaeological site include ephemeral surface features, such as middens or garbage dumps, surface scatters of broken ceramics or stone tools, and extramural hearths or fire rings. The law prohibits entering, altering, or damaging these surface features, as well as structures. Middens and surface artifact scatters almost always surround the rock art and structural features. However, since virtually every archaeological or historical site of interest to visitors has a trail to and through it, visitors may legally cross middens, overhangs, surface scatters, etc. to see features of interest as long as they go single file and stay on existing trails. Walking off existing trails through archaeological or historical sites is prohibited under the Code of Federal Regulations and the Archaeological Resources Protection Act.

B. EMERGENCY SERVICES

In the event of life-threatening emergencies or if park resources are being significantly impaired, the NPS may conduct emergency operations (such as search and rescue) which violate rules set forth in this plan.

C. WILDERNESS AND SOLITUDE

By zoning Canyonlands and Orange Cliffs backcountry and redistributing use into zones most capable of withstanding visitor impacts, visitors are ensured opportunities for solitude. Under all alternatives, Canyonlands National Park's backcountry and Glen Canyon National Recreation Area's "natural" zoned lands will continue to be managed as wilderness until Congress acts on proposed wilderness areas.

D. UPDATING THE PLAN

The duration of this plan is expected to be at least five years. However, the plan and its impacts to the park will be reviewed and updated as necessary by the Resource Management Division of Canyonlands National Park, with input from Glen Canyon National Recreation Area.

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Agencies Consulted

U.S. Forest Service, Monticello District

Bureau of Land Management
Grand Resource Area
San Juan Resource Area
Henry Mountain Resource Area

National Park Service
Glen Canyon National Recreation Area
Grand Canyon National Park
Navajo National Monument
Canyon de Chelly National Monument
Wupatki National Monument

National Biological Survey

U.S. Fish and Wildlife Service

Utah State Historic Preservation Office

Utah Division of Indian Affairs

Indian Tribes

Acoma Pueblo
Cochiti Pueblo
Isleta Pueblo
Jemez Pueblo
Laguna Pueblo
Nambe Pueblo
Picuris Pueblo
Pojoque Pueblo
Sandia Pueblo
San Felipe Pueblo
San Ildefonso Pueblo
San Juan Pueblo
Santa **Ana** Pueblo
Santa Clara Pueblo
Santo Domingo Pueblo
Taos Pueblo
Tesuque Pueblo
Zia Pueblo
Zuni Pueblo
Hopi Tribe
All Indian Pueblo Council

Eight Northern Indian Pueblo Council
Southern Pueblo Council
Kaibab Paiute
San Juan Southern Pueblo
Paiute Tribe of Utah
Uintah and Ouray Utes
White Mesa Ute
Southern Ute
Ute Mountain Ute
Navajo Nation

APPENDIX A: FINDING OF NO SIGNIFICANT IMPACT

Final 1994 Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan

Canyonlands National Park

November 30, 1994

In accordance with the provisions of the National Environmental Policy Act of 1969 (NEPA) and the regulations of the Council on Environmental Quality (40 CFR 1508.9), the National Park Service prepared an environmental assessment (EA) for the Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan. The EA analyzed and evaluated the impacts of multiple alternatives for management of visitor use of the backcountry of Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area. This EA was released for public comment in December, 1993.

THE PROPOSAL

The proposal is a series of management actions which will allow the NPS to balance its mandates of allowing public access and enjoyment of the backcountry while providing long-term preservation and protection of resources. In the proposal, backcountry use will be distributed by zones. A reservation system will be implemented to facilitate visitor use of the zones. Substantive changes in management include limits on the number of overnight groups per zone; designated backpack campsites in some zones; group size limits, new regulations for climbing, and pack and saddle stock use; and closure of some segments of roads to protect resources. The proposal also resolves lesser issues such as signs, education, pets, etc.

The proposal is based on preferred alternatives described in the draft plan and EA, other alternatives in the draft plan and EA, or alternatives modified based on public comments. A summary of the some of the more controversial issues in the proposal follows.

The zoning scheme proposed is a simplified version of the preferred alternative based on comments that the original zoning scheme was too complicated. Impacts related to this change are expected to be restricted to areas already impacted by current visitor activities. In two of the three districts, group size for backpack campers was increased by one person, and number of vehicles per campsite was increased by one over the proposal. Two additional campsites in the Orange Cliffs will be designated to facilitate travel. In Horseshoe Canyon, a combination of alternatives was chosen, providing for walkways and barriers, guided hikes, and group size limits for access without a guide.

The management solution selected to allow vehicular access to Angel Arch while reducing adverse impacts on riparian resources of Salt Creek and Horse Canyon roads is a combination of alternatives

presented and suggestions made by the public. Salt Creek and Horse Canyon will remain open to a limited and regulated amount of vehicular traffic. A maximum of 20 vehicles per day will be permitted in this zone, a reduction from the peak use of 60 to 70 vehicles per day which now occurs during the spring. This will reduce the impacts to the riparian ecosystem.

The management solutions for Davis and Lavender canyons combine public suggestions and EA alternatives. Many public comments called for the closure of these areas to protect archeological, social and riparian resources, as did Alternative A presented in the EA. Lavender Canyon will remain open to limited amounts of vehicle traffic. Davis Canyon will be closed to vehicle access. The adoption of these policies will reduce the impacts to cultural and natural resources in both canyons. In Davis Canyon, the newly converted foot trail will provide the only designated hiking trail in the larger drainages on the eastern side of the Needles District where hikers can enjoy a canyon without vehicle traffic.

Overnight pack and saddle stock use will be permitted in designated vehicle campsites. This proposal is a combination of the no action and preferred alternative and takes into account comments from horse users that they wished to use the backcountry overnight.

Commercial use will be allowed as described in the preferred alternative, with a few additional permit allotments and the retaining of Commercial Use Licenses for commercial backpacking.

Rock climbing will be managed as in the preferred alternative with the addition of allowing climbing on existing routes in all parts of the planning area. A definition of canyoneering added, as suggested by public comment.

ALTERNATIVES CONSIDERED

Thirty-eight issues were addressed in the EA. Each issue had at least a no action alternative, and many issues had multiple possible alternatives. Some of the more complex issues included vehicular access to Salt Creek, Horse, Davis, and Lavender canyons, group size, protection strategies for rock art in Horseshoe Canyon, commercial activities, and rock climbing.

PUBLIC INVOLVEMENT AND CONSULTATION

Public involvement in the planning process began in May of 1992 when park visitors and the general public were asked what issues should be addressed in the plan and EA through questionnaires, comment sheets distributed in the park, publication of a “notice of intent” to prepare the plan and EA in the Federal Register, and through press releases. About 40 issues were raised in 158 responses received by October 1992. An additional comment period was held to solicit ideas on addressing issues identified in scoping. Six public meetings were held and 111 written comments were received.

Beginning in December, 1993 nearly 2,000 copies of the draft plan were distributed for public review. The public commented on the plan through letters, questionnaires, and public meetings. The comment period closed March 5, 1994 with 2,235 written comments containing 3,235 signatures received. Based on these comments, many of the preferred alternatives in the draft plan were modified in the final

solutions in the proposal.

Consultation was conducted and comments received from interested Indian tribes, various Federal agencies including the Bureau of Land Management, Forest Service, Fish and Wildlife Service, and State and local agencies such as the Utah State Historic Preservation Office, and San Juan County, Utah.

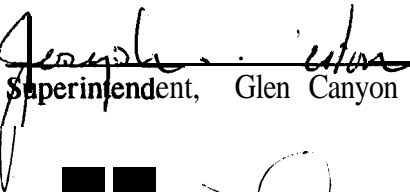
CONCLUSION

The Final Backcountry Management Plan for Canyonlands and the Orange Cliffs Unit does not constitute an action that normally requires the preparation of an environmental impact statement. The plan will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, sites or districts listed on or eligible for listing on the National Register of Historic **Places**, or other unique characteristics of the region. The actions proposed in this plan will not affect any Federally listed threatened or endangered species. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. The activities covered in this plan are not subject to Executive Order 11990, therefore a Statement of Findings will not be prepared. Implementation of the action will not violate any federal, state or local laws.

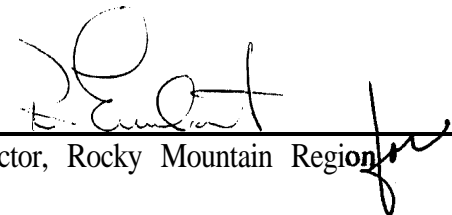
Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and thus will not be prepared.

Recommended:

 1/10/95
Superintendent, Southeast Utah Group Date

 1-13-95
Superintendent, Glen Canyon National Recreation Area Date

Approved:

 1 2 5 95
Regional Director, Rocky Mountain Region Date

APPENDIX B. THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS FOR THE PLAN

SCOPING

The planning process began in June of 1992 with the formation of a multi-disciplinary planning team. The team reviewed the legislation relating to backcountry management, as well as problems and issues affecting the backcountry. The public became involved in the planning process in May of 1992 with the beginning of a scoping period. Press releases announcing the scoping period for the plan and environmental assessment were submitted to regional newspapers, television, and radio stations. In addition, on June 18, 1992, a “notice of intent” to prepare the backcountry management plan and environmental assessment was published in the Federal Register. Questionnaires distributed at Park visitor centers throughout the planning area and in response to telephone calls and mail requests resulted in the identification of 38 issues to be addressed from the 158 responses that were received by October of 1992.

DEVELOPMENT OF ALTERNATIVES

The next planning phase began in November of 1992 when a newsletter was mailed to about 600 individuals and organizations who had expressed interest in the planning process. The newsletter sought additional public input on issues identified during scoping. Some 111 responses to the newsletter were received by February of 1993. During December of 1992 and January of 1993, some 51 people attended six public meetings held throughout the region to discuss issues in the newsletter.

Based on public and staff input, the planning team developed a series of alternatives to address backcountry issues. These alternatives were described in the Draft Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Environmental Assessment for Backcountry Management (December 1993). Nearly 2,000 copies of the draft Environmental Assessment (EA) were distributed for review and comment to people or organizations who had participated in previous comment periods or who had asked to be on the mailing list. News releases were sent to Utah and Colorado newspapers, television stations and radio stations announcing the availability of the draft environmental assessment. Local newspapers and radio stations received news releases announcing public meetings to discuss the plan. Public meetings were held in January 1994 in Green River, Hanksville, Monticello, Moab, and Salt Lake City, Utah and in Denver, Colorado with a total of 471 people attending. The public was initially asked to respond to the environmental assessment during the period from December 18, 1993 to February 18, 1994, but due to public interest, the comment period was officially extended to March 5, 1994. All comments from speakers at the public meetings and all written comments postmarked by March 31, 1994 were considered by the planning team.

COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT

The planning team received 2,235 written comments containing signatures from 3,235 individuals, and 471 people attended public meetings on the draft plan and environmental assessment. Some people commented on the few issues of interest to them; others commented on all issues. Many responded to letter writing campaigns initiated by special interest groups, such as horse or pack stock organizations, four-wheel-drive clubs, rock climbing organizations, and environmental organizations. The number of responses received by each type of commentor is shown in Table B. 1 below.

Each comment was read, coded, and input in database. Information on the type of comment received (letter, chart, letter writing campaign, etc.) and the commentator (individual, commercial company, federal agency, etc .) was entered as well as verbatim comments pertaining to specific issues. The comments were then sorted by issue, and all the verbatim remarks were printed out for the planning team to read. The team carefully considered all the public comments, and examined all management solutions submitted by the public but missed by the draft environmental assessment.

Commentors also differed in their place of origin. Utah residents accounted for 31 percent of the comments, and Colorado residents accounted for 21 percent. Another 48 percent of the comments came from residents of other states, with less than 1 percent coming from other countries.

Table B. 1. Numbers and Types of Commentors

<u>Type of Commentor</u>	<u># of Signatures</u>
Individuals	681
Agencies (federal, state, county, city)	10
Elected Federal Officials	2
Universities, Schools	5
Tribal Governments	2
4-Wheel-Drive Organizations*	23
4-Wheel-Drive Interests?	640
Environmental Organizations*	9
Environmental Interests†	652
Saddle & Pack Organizations*	28
Saddle & Pack Interests?	781
Rock Climbing Organizations*	5
Rock Climbing Interests?	269
Commercial Organizations*	21
Commercial Interests†	93
<u>Other Organizations*</u>	<u>14</u>
TOTAL	3235

*Organization is an officer of an organization acting on its behalf.

†**Interest** is a member of the organization or group.

Comments differed in form and content, as shown in Table B.2. Con-mentors spoke at public meetings, used the response chart included in the EA, or wrote letters. Comments ranged from a 30 second **single-**issue comment at a public meeting, to several booklets nearly as long as the EA itself, to a complete manuscript inspired by the backcountry. The planning team created a computerized data base to facilitate a systematic and objective review of each issue and each solution from each public comment that enabled them to find the best ways to meet the backcountry management mandates and objectives.

Table B .2. Type of Response

<u>Type of Resonse</u>	<u># of Signatures</u>
Letter	468
Response Chart	199
Letter & Chart	115
Form Letter	498
Public Hearing Transcript	76
Petition	464
<u>Writing Campaign</u>	<u>1415</u>
TOTAL	3235

FINAL DECISION MAKING

The length of time the planning team spent to read, code, input, and analyze the public comments assured consideration of all responses. The role of the public in NEPA is particularly important during scoping, when the public helps decide which issues should be addressed in the environmental assessment. In this planning process, additional public input was solicited to suggest ways to address the issues identified in scoping. The public also participated in the process by attending public meetings and submitting comments to the agency, and by suggesting viable management alternatives that the planning team had not considered. This **final** plan reflects several changes due to public comment. However, the number of comments supporting or opposing the various proposed management alternatives was not the sole factor in selecting management alternatives.

After consideration of all public comments, the planning team made recommendations to the park Superintendents. After reviewing planning team recommendations and analyzing the public comments, the Superintendents selected a final management alternative for each issue based on the enabling legislation for the planning area, the NPS Organic Act, other laws and policies affecting the planning area including the NEPA, the National Historic Preservation Act of 1966 as amended, the Endangered Species Act of 1973 as amended, the Wilderness Act of 1964, etc., and consistency with other plans, such as the General Management Plan of 1978.

This plan and the attached Finding of No Significant Impact (FONSI) represent the **culmination** of the two-year NEPA process and planning effort. The plan is expected to guide management of the backcountry for at least five years.

APPENDIX C. BACKCOUNTRY PERMIT RESERVATION SYSTEM

TO RESERVE A BACKCOUNTRY USE PERMIT

Backcountry use permits will be available by advanced reservations beginning sometime in late January 1995. Reservations will be strongly recommended so visitors will be assured of a permit and campsite availability. Reservation requests will be made by mail, in person or over the telephone. Reservation requests may be mailed to the Central Reservation Office, Canyonlands National Park, 2282 S. West Resource Blvd., Moab, UT 84532. Telephone requests will be accepted during office hours (to be designated) at 801-259-4351. Telephone requesters must provide a Visa or Mastercard number to pay the required processing fee. The NPS will return a written request confirmation.

TO OBTAIN A BACKCOUNTRY PERMIT

Backcountry users must pick up their backcountry use permit from the visitor center in the district where the trip begins. The reservation confirmation holds the campsites and zone allocation, it is not a backcountry permit. The backcountry use permit is valid only for the specified itinerary and dates on the backcountry permit. If a permit is not claimed by the time specified on the written confirmation, the entire trip is automatically canceled. It is possible to pick up your permit one day before the trip is scheduled to begin. No backcountry use permits will be issued less than one hour before the close of the visitor center.

Unused or non-reserved backcountry use allocations or use reservations not picked up one hour prior to the close of the visitor center on the first day of the reserved trip will be available to visitors walking into the visitor centers on a first-come, first-served basis.

FEES

Non-refundable fees will be charged to offset costs of the reservation system. Fees associated with permit reservations will remain in Canyonlands National Park to fund the reservation system and support backcountry management. These fees are not waived for any group, including educational groups. In addition to backcountry use reservation fees, visitors will be required to pay park entrance fees where applicable. Fees will be charged for the following uses:

- Backpacking permits
- Backcountry vehicle campsites
- Day use permits (for Salt Creek and Horse and Lavender Canyons, where day use is limited)
- Cataract Canyon river trips (multi-day)
- Cataract Canyon river trips (one day)
- Flatwater river trips

APPENDIX D. COMMERCIAL USE

A commercial trip or operation is defined as a trip where actual costs are not shared equally by all participants, profit is a goal of the trip, or, there is public advertising for participants. Commercial use is regulated by the mode of transportation used in the backcountry. Definitions, regulations and the specifics for managing commercial use are outlined in the Commercial Visitor Services Management Plan for Arches National Park, Canyonlands National Park and Natural Bridges National Monument. Commercial river trips are addressed in the Canyonlands river management plan. All commercial operations must have authorization from the Superintendent or Concession Specialist prior to offering any services in the park or recreation area. It is important to note that clients of park concessionaires are also “park visitors” who accomplish their visit with the help of the outfitter.

Activities by groups that do not fall under commercial guidelines (educational groups where academic credit is available and the Boy Scouts, for example) may visit the park or recreation area under the regulations for noncommercial visitors. Special organized events must apply to the Chief Ranger for a permit.

All commercial backcountry operations and operators must comply with all provisions, rules and regulations of this Plan. Backcountry commercial operators may reserve permits on the same basis as the public. Commercial operators can be allocated additional backcountry permits on the day of their trip if walk-in backcountry permits are available. Numbers of permits that may be reserved by commercial operators are defined below.

COMMERCIAL VEHICLE AND BICYCLE OPERATIONS

Currently three companies may offer commercial vehicle services under concession permits. Two companies may provide overnight vehicle tours, as well as day trips; the third company may provide day trips only.

Five bicycle tour operators may offer overnight bicycle tours and services. These operators are regulated through concession permits. Commercial bicycle day use has been unregulated. Upon expiration of the current licenses in 1996, commercial bicycle day use in the front country will also be regulated through concession permits. Allocation of permits to vehicle and tour operators is shown in Table D. 1

In addition to limited permit allocation, location of permits in the Island in the Sky District is regulated. No more than one campsite may be reserved in advance by any commercial company for any given night. No more than two commercial companies will be allowed to make an advanced reservation for a campground location containing three campsites, or to reserve more than one site at a two-site camp area.

In the Needles District, only one of the two Peekaboo campsites may be occupied by a commercial operator on any one night. In the Maze District, only one campsite at the Maze Overlook and one at the Doll House may be occupied by commercial operators on any given night.

Table D. 1. Total Number of Backcountry Permits Allocated to Commercial Vehicle and Bicycle Operations Per Day or Night

DISTRICT or Area	# PERMITS FOR VEHICLE CAMPING	# PERMITS FOR DAY USE VEHICLE	# PERMITS FOR DAY USE BICYCLE
ISLAND IN THE SKY	5	--	--
NEEDLES	2	--	--
Salt & Horse	--	2	7
Lavender Canyon	--	2	7
MAZE, ORANGE CLIFFS	3"	--	--

*Of the three (3) permits allocated for commercial vehicle use in the Maze and Orange Cliffs, no more than two (2) sites may be occupied in the Maze District on any one night.

COMMERCIAL BACKPACKING

Commercial backpacking will continue to be regulated by Commercial Use Licenses (CULs). The backpacking CULs will be limited by the number of backcountry permits allocated for commercial backpacking. The CULs will also be limited to commercial organizations that can meet the group size limits of seven (7) backpackers in the Needles and Island in the Sky districts, and five (5) backpackers in the Maze and Orange Cliffs. Continued operation under CULs will allow a variety of commercial backpacking trips to be offered.

Advance reservation for permits for commercial backpack camping will be limited as shown in Table D.2.

Table D.2 Total Number of Overnight Permits Allowed for Commercial Backpack Concessionaires Per Night Per District

DISTRICT	NUMBER OF PERMITS
Island in the Sky	1
Needles	4
Maze and Orange Cliffs	2

COMMERCIAL FILMING

Commercial filming will continue to be administered through established NPS guidelines (NPS-21). Each request for filming will be evaluated based on the specifics of the proposed project. All restrictions imposed by this Plan will apply to all commercial **filming** activities in the backcountry. No area or activity will be permitted for commercial **filming** that is not available to the general public on an equal basis.

Commercial filming involving aircraft and overflights in Canyonlands must follow all the rules for both activities. Aircraft shall maintain an altitude of 2,000 feet above surface level with the term “surface” defined as the highest terrain within 2,000 feet laterally and vertically of the flight route at all times. Flight routes will be approved in advance. Aerial acrobatics are prohibited. Aircraft may not take off or land within the park.

All potential filming activities within the boundaries of Glen Canyon and Canyonlands are subject to well-established permit procedures that include pre-approval of all filming locations and activities, recognition of Federal Administration Administration regulations regarding management of airspace and waivers thereof, close monitoring of all **filming** activities, insurance requirements, security bonds, and the authority of the NPS to recover all costs associated with the issuance and monitoring of **filming** permits.

COMMERCIAL PACK AND SADDLE STOCK USE

No commercial pack and saddle stock use will be allowed after December 1994. There has been only one commercial horse trip in the last four years, and this service appears to be unneeded. If at some time in the future this service becomes necessary, commercial horse and pack stock service may be resumed.

COMMERCIAL ROCK CLIMBING

No commercial rock climbing will be allowed. In 1994, no Commercial Use Licenses for rock climbing were issued, and no complaints or requests from people wanting a rock climbing guide were received by the NPS.

Commercial canyoneering is regulated under the commercial backpacking and hiking regulations.

APPENDIX E. DESIGNATED BACKCOUNTRY VEHICLE AND BACKPACK CAMPSITES

Table E. 1. Designated Vehicle Campsites, Limits and Facilities (note: fire grates are not provided)

DISTRICT Zone	CAMPING AREA	# SITES	# PEOPLE/ # VEHICLES PER SITE	FACILITIES
ISLAND IN THE SKY		20 total		
White Rim	Shafer	1	15 / 3	1 toilet
	Airport	4	15 / 3	2 toilets
	Gooseberry	2	15 / 3	1 toilet
	White Crack	1	15 / 3	1 toilet
	Murphy	3	15 / 3	2 toilets
	Candlestick	1	15 / 3	1 toilet
	Potato Bottom	3	15 / 3	2 toilets
	Hardscrabble	2	15 / 3	2 toilets
	Labyrinth	2	15 / 3	1 toilet
Taylor Canyon	Taylor	1	15 / 3	1 toilet
NEEDLES DISTRICT		12 total		
Salt & Horse	Peekaboo	2	10 / 3	1 toilet 2 tables
Red Lake & Grabens	Devils Kitchen	4	10 / 3	2 toilets 4 tables
	Bobby Jo	2	10 / 3	1 toilet 2 tables
	Horsehoof	1	10 / 3	1 toilet 1 table
	New Bates Wilson ("Picnic Site")	2	10 / 3	* 2 tables
	Cyclone	1	10 / 3	* 1 table

DISTRICT Zone	CAMPING AREA	# SITES	# PEOPLE/ # VEHICLES PER SITE	FACILITIES
MAZE & ORANGE CLIFFS		20 total		
Maze Area	Doll House	3	9 / 3	none
	Chimney Rock	1	9 / 3	none
	The Wall	1	9 / 3	none
	Standing Rock	1	9 / 3	none
	Maze Overlook	2	9 / 3	none
	Golden Stairs**	1	9 / 3	none
	Teapot Canyon**	1	9 / 3	none
	Sunset Pass* *	1	9 / 3	none
Orange Cliffs	Flint Seep* *	1	16 / 5	none
	The Neck**	1	9 / 3	none
	Happy Canyon**	1	9 / 3	none
High Spur	North Point**	1	9 / 3	none
	Panorama Point**	1	9 / 3	none
	Cleopatra's Chair* *	1	9 / 3	none
	High Spur**	1	9 / 3	none
	Millard Canyon	1	9 / 3	none
	Ekker Butte* *	1	9 / 3	none

Portable toilets required.

** Campsite in the Orange Cliffs Unit of Glen Canyon. All others are in Canyonlands National Park.

Table E.2. Zones With Designated Backpacking Campsites (no facilities are provided)

DISTRICT	ZONE	# CAMPSITES	GROUP SIZE
Island in the Sky	Syncline	1	7 people
Needles	Upper Salt	4	7 people
Needles	Needles Trails	16	7 people

APPENDIX F. RESPONSE TO SUBSTANTIVE COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL ASSESSMENT

The following are agency responses to substantive comments on the draft environmental assessment (EA). Similar comments have been consolidated.

PLANNING AND NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS

Comment: The NEPA process was not followed in this environmental assessment.

NPS Response: The “NEPA process” is defined in 40 CFR 1500-1508 as all measures necessary for compliance with the requirements of section 2 and Title I of the National Environmental Policy Act. These sections and titles require Federal agencies to evaluate the environmental effects of a federal undertaking, including its alternatives. The planning team determined the appropriate level of analysis for the backcountry management plan to be preparation of an environmental assessment (EA). Additional steps in the planning and NEPA process are described in Appendix B.

Comment: There was not adequate public comment in the preparing of this Plan. Other agencies whose lands may be affected were not consulted.

NPS Response: The public played an important role in the planning process, not just in providing input on issues to be addressed in the EA, but in finding management solutions to backcountry problems. A full explanation of the public role in the planning process is found in Appendix B.

Other agencies were fully involved in the planning process. Other agencies were included in as many of the planning steps as the general public. In addition, many informal interagency meetings and consultations about the plan were held. The United States Forest Service, Bureau of Land Management, Fish and Wildlife Service, the State of Utah Department of Natural Resources, Utah Division of Wildlife Resources, State of Utah Bureau of Indian Affairs, The Pueblo of **Acoma**, The Hopi Tribe, San Juan County, and the cities of Monticello and Blanding, Utah participated.

Comment: Too few alternatives were presented for most issues. Cumulative **impacts were not adequately** addressed and reasoning presented for “Alternatives Considered but Rejected” was not strong enough to support rejecting these alternatives.

NPS Response: The regulations for implementing NEPA (43 CFR Part 1502.14) require only that the federal agency “rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” The alternatives which were presented in the draft plan and EA were those alternatives the planning team felt were reasonable, given constraints of the General Management Plan, the enabling legislation for the planning area, and the various federal mandates affecting the planning area. NEPA regulations require **inclusion of** a no action alternative and identification of a preferred alternative, but there is no requirement to consider a long list of alternatives for each issue. NEPA regulations (43 CFR 1501.2) require **description of** alternatives to recommended courses of action only in cases involving unresolved conflicts **concerning** alternative uses. In the EA, fewer alternatives were presented **for less complex issues and a wider ranges** of alternatives were presented for more complex issues, or for issues where solutions to **management**

problems were unclear or unresolved. The number of alternatives described per issue was in full compliance with the letter and spirit of NEPA.

Alternatives **Considered** but Rejected were briefly described, as required. Cumulative impacts were described to the extent they could be anticipated at this time. Monitoring of future impacts is an important element of the plan.

Comment: Management tools that monitor impacts to resources and define acceptable levels of impacts, such as Limits of Acceptable Change, were not used in this EA.

NPS Response: The planning process was based largely on the Visitor Experience and Resource Protection planning process (VERP), currently being developed by the National Park Service. Since several members of the planning team for this EA were also on the VERP team, the VERP process was implemented as it was being developed.

The last step in the VERP process is to monitor the impacts of management decisions, and make sure resources and visitor experiences are properly managed. This monitoring step will begin as soon as this plan is implemented.

Comment: The planning process and the alternatives proposed do not comply with NPS-77, NPS Management Policies, the Organic Act, and the General Management Plan by not allowing for adequate recreational opportunity in the face of increasing demand.

NPS Response: The planning process was in full compliance with these guidelines and mandates. The planning process and all alternatives selected in the plan are based on fulfilling the NPS mandate "... to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. " The planning team recognized the diversity of recreational uses and visitors to the planning area, and they described alternatives and selected management solutions based on providing access for all types of visitors, while ensuring long-term and short-term preservation of resources. The balance sought between numbers and types of visitors and protective measures is in full compliance with the mandates and policies guiding the NPS.

Comment: Discussion of wilderness and the effect of the proposals on wilderness were lacking.

NPS Response: As shown on pages 16, 17, 44, 60 of the EA, the 1974 Wilderness Recommendation for Canyonlands, and wilderness recommendations for the Natural Zone within Glen Canyon, were fully incorporated in the alternatives presented.

ISSUES AND ALTERNATIVES PRESENTED

Orange Cliffs

Comment: The Orange Cliffs Unit of Glen Canyon National Recreation Area was not **designated** by Congress to be a National Park, yet under this plan, it will be managed in the same manner as, **and by**, Canyonlands National Park.

NPS Response: Canyonlands National Park will manage recreational use in the Orange Cliffs; Glen Canyon National Recreation Area will continue to manage all other uses in the Orange Cliffs. Enabling legislation for Glen Canyon provides the same level of protection for the recreation area as the enabling legislation for Canyonlands National Park; therefore, management solutions to problems in Maze will work equally well in the Orange Cliffs.

Zones

Comment: **The** proposed zone system is too complex. It would be nearly impossible to get sequential nights in zones desired and would force use into less popular, more pristine areas.

NPS Response: The planning team agreed. The entire zone system has been revised making it less complex.

Comment: Level of use in each zone should be based on something more substantial than 1992 use. Also, in zones that have permits that are available only once a week or a month, historic levels of use would not be met.

NPS Response: The highest monthly use ever recorded was in April of 1992. Since the planning process was initiated at that time in response to negative impacts on park resources and visitor experiences, the use of April visitation levels was logical. The only time of year where current levels of use will be curtailed will be during spring break season--when visitation is at its highest and potential for resource damage greatest.

Roads

Comment: There was no serious consideration given to closing a large portion of the roads which divide up the backcountry.

NPS Response: **The** backcountry planning process is not the place for making decisions about closing major roads. Opening or closing major roads is an issue to be dealt with during development of a new General Management Plan.

Comment: 36 CFR Sec. 4.10 prohibits designation of ORV routes and areas in National Parks. We believe that **ORVs** are vehicles that are capable of cross-country travel over natural terrain (see Conservation Law Foundation of New England Inc. V. Secretary of the Interior, 864 f. 2d 954, 956, fn. 1 [1st Cir. 1988]). Sec. 3(a) of Executive Order 11644, 37 Fed. Reg. 2877, **(1972)**, as amended by Executive Order 11989, 42 Fed. Reg. 26959 (1977) outlines the circumstances in which off-road vehicle use may occur in NPS areas. The plan does not make the determination that this use is suitable.

NPS Response: Major questions of vehicular access and designation of roads are dealt with in the General Management Plan, not through the backcountry management planning process.

Comment: Reasons presented for closing roads were not adequate. Also, areas that are closed to vehicles, but still allow hikers, will continue to have resource concerns. Resource damage by hikers was not analyzed.

NPS Response: One of the primary goals of the plan was to balance access and restrictions placed on all types of backcountry users. The planning team, as well as the enabling legislation for the planning area, recognized that multiple forms of access and the differing impacts resulting from each type of access (foot, vehicle, etc.) could be accommodated in the backcountry. Resource damage by hikers was given full consideration as demonstrated by the newly designated campsites for backpackers. New rules and regulations for backpackers are found throughout the plan. Where areas will be converted to hiking trails, it has been determined by the planning team that the foot traffic expected in that area will be sustainable without unreasonable resource damage. Proposed road closures were based on natural, cultural or social resource concerns.

Salt Creek and Horse Canyon

Comment: There is no definitive proof the road in Salt Creek has caused any significant environmental damage. Studies in this area have been inconclusive.

NPS Response: There have been numerous studies done in riparian areas demonstrating that the presence of unvegetated areas (such as roads and campsites) negatively impact many wildlife species such as birds, reptiles and small mammals. It has also been repeatedly demonstrated that unvegetated areas result in greater water runoff (thereby reducing water available locally to plants) and greater sediment production. Sediment production is of concern because it can impact aquatic species, as well as result in widening of these areas. Widening of riparian corridors can result in increased water temperatures and negatively affect both fish and aquatic invertebrates.

Mitchell and Woodward's studies (1993) in Salt Creek indicate that the presence of the road has resulted in decreased bird, small mammal, aquatic invertebrate and vascular plant populations when compared to the immediately adjacent area without the road. This study was as definitive as any that could be done in this area, given that the road already exists and is in use. An additional study has documented that the road has negatively impacted aquatic invertebrate populations, verifying the findings of Mitchell and Woodward.

Erosion has increased due to the presence of the road, which has been driven by over 1000 vehicles per month in peak periods. Deteriorating conditions have been noted by numerous drivers.

Comment: Damage to water resources would be continued under the proposal.

NPS Response: *The only* possible vehicular access to Angel Arch is the Salt Creek Road. If the road were rerouted out of the pools of water and onto the stream bank in the limited places where this is even possible, riparian vegetation would be adversely impacted. By limiting the number of vehicles driving in Salt Creek, impacts on the wetlands will be reduced. Furthermore, converting Davis Canyon road to a trail will significantly improve the wetlands in Davis Canyon.

Comment: Horse Canyon does not have the ecosystem concerns of other areas suggested for closures. A

“guided walk only strategy” is not needed.

NPS Response: The proposed guided walks for Horse Canyon were proposed to protect cultural resources--not natural resources. The proposal recognized that if the traffic was reduced or restricted in Salt Creek, then visitors displaced from Salt Creek would move into Horse Canyon. Since Horse Canyon is relatively pristine (in both natural and cultural resources), changes in the Salt Creek Road management would significantly impact Horse Canyon resources. Proposed guided tours have been eliminated in the final plan.

Comment: Closing Salt Creek violates the General Management Plan and the Organic Act by removing access to Angel Arch for most visitors.

NPS Response: The draft plan proposed elimination of vehicular access, not hiking access. However, based on public response, staff patrol concerns, the importance of Angel Arch as the destination, and improved protection of the riparian environment, the road to the arch will remain open to reduced numbers of vehicles.

Climbing

Comment: A clear definition of canyoneering was not presented.

NPS Response: Canyoneering has been defined in the final plan and rules and regulations for canyoneering have been clarified.

Comment: There has been no data presented to support the severity of the climbing restrictions proposed.

NPS Response: In response to comments on the EA, proposed climbing closures for the Maze District, the Needles District, and the Orange Cliffs Unit have been eliminated. Existing climbing closures for the Salt Creek Archeological District of the Needles District, the Horseshoe Canyon Unit of the Maze District, and on named arches or natural bridges will continue. Climbing regulations are consistent with the draft National NPS Climbing Guidelines. The bulk of Canyonlands National Park will remain open to clean climbing. The most popular rock climbing routes in southeast Utah are outside the park boundaries and outside the jurisdiction of this plan.

Commercial Use

Comment: The proposal, including reduced group size, very limited numbers of permits, and the elimination of some types of commercial use will eliminate commercial use, or make the costs of running tours prohibitive. No economic impacts were addressed.

NPS Response: Reduced groups sizes may result in an increase in the cost of commercial tours; however, commercial use will certainly not be eliminated by the plan. Changes in group size and allocation of permits will be instituted with adequate lead time so concessionaires may adjust their operations. The reservation system will facilitate commercial use since tour operators will be able to plan their itineraries well in advance. Economic impacts were addressed on page 58.

Backpack Camping

Comment: Location of designated backpacking campsites were not shown. Without knowing locations,

numbers of sites and how much damage to an area camping causes, it is difficult to assess this part of the plan.

NPS Response: These locations had not been selected at the time of final preparation of the Backcountry Management Plan. Before a campsite is designated, the area will be surveyed for flood plain concerns, cultural resources and threatened or endangered species. Campsites will not be located in areas that adversely impact these resources or are in a flood plain.

Reservations

Comment: Details of the reservation system and the fees for reservations were not presented.

NPS Response: Details were not fully developed at the time of plan release. The reservation system will be modeled after the system currently in use on the White Rim Road, but is expected to undergo some fine tuning in the first year of operation. As of January 1995, information on the reservation system will be available by calling 801-259-4351. A list of current fees will be available on request.

Group Size

Comment: There is no evidence that shows that current group size is too large. There is no rationale behind the group sizes chosen.

NPS Response: The group sizes selected were based on the Canyonlands General Management Plan mandate to provide for different visitor experiences, and on observations of visitor behavior and resulting social and resource conditions in each area.

The General Management Plans for Canyonlands and Glen Canyon require management to provide diverse recreational opportunities for the visitor. These activities are restricted by land use planning guidelines that set limits on the types of activities that can occur in various districts or zones. While the Needles and the Island in the Sky districts are to provide for a range of recreational experiences, the Maze district is to be managed with "remoteness and self-reliance the principle elements of the visitor experience." The Orange Cliffs Unit is divided into two zones, one of which is managed to be "relatively undisturbed, isolated, and remote," the other of which allows slightly more "susceptibility to the activities of man." The lower group size numbers for the Maze and the Orange Cliffs reflect these mandates. The group size limits in the other districts correlate with the intended social and recreational experiences in those districts.

When the behaviors of large groups and smaller groups are compared, larger groups show a greater potential to cause resource damage. While all campsites experience some degree of damage, larger groups use more area for tents, create more social trails between tent, kitchen and bathroom areas, and generate an increased concentration of human waste. Where campsites are designated, and the impacts inherent to camping are limited to those areas, some of this problem is **mitigated**. Lower group size for at-large backpack camping is particularly important.

Studies have found large groups to be responsible for much of the damage to cultural sites in the backcountry. Observations of visitors to parks and cultural sites around the world (Gale and Jacobs, 1986 and 1987) indicate that much of the damage is due to large groups of people attempting to enter too small an area.

Recent sociological studies at Arches National Park also indicate that the group size limits set by this plan are appropriate. People surveyed indicated that group size limits should be eight on front-country trails. The intent of the Park Service is to provide a range of recreational opportunities. If eight is appropriate for front-country trail group size, a lower number should be appropriate for the more remote backcountry experience. With group sizes of seven (Island in the Sky and Needles) and five (Maze and Orange Cliffs), a spectrum of back-country experience is offered.

The proposed group sizes will **acomodate** 90 percent or more of the current groups in Canyonlands. Statistics from Canyonlands backcountry permits from 1988 to 1992 for backpacking groups show that:

- In the Maze District, 90 percent of the groups were less than or equal to five (the proposed maximum group size).
- In the Needles District, 96 percent of the groups were less than or equal to seven (the proposed maximum group size).
- In the Island in the Sky District, 98 percent of the groups were less than or equal to seven (the proposed maximum group size).

Day Use

Comment: Methods for dealing with day use are inadequate or unrealistic. Data for the impacts of day use is not presented.

NPS Response: Potential for growth in day use has not been extensively addressed in this Plan. It is a topic that the National Park Service is beginning to grapple with nation wide, and it will be examined in a future revision of the General Management Plan.

Human Waste

Comment: Nothing indicates that the Maze district has a more severe human waste problem than the rest of the Park, yet restrictions are more strict.

NPS Response: Given the shallow soils in the Maze, the problem of human waste deposits is particularly severe there. Because the roads into the Maze are too rough for toilet pumper trucks, the only cost effective and sanitary method of waste disposal is to have visitors containerize and pack out their own.

Off Season Use

Comment: It is not clear how off-season use will be controlled if it exceeds the amount **defined** in the proposal.

NPS Response: At the time that use exceeds the limits set in the proposal, managers will review the type and concentration of use and **define** necessary limits.

NATURAL RESOURCES

Wildlife

Comment: No data has been presented to show that human visitation has impacted bighorn sheep. The closures to protect bighorn sheep are severe.

NPS Response: Research on the effects of human activities on bighorn is underway in Canyonlands. Meanwhile, the herd in the Needles District has been severely reduced due to disease. The small herd remaining in the area slated for closure in the Needles District concentrates its activities around the water source. The main route of travel for visitors to the area also passes the water source. Escape terrain (slopes used by bighorn for safety when disturbed) nearby is limited, resulting in sheep moving from human activity, being re-disturbed, then moving again. Unless research proves otherwise, these sheep must be protected from further stresses until the population can recover.

Comment: Raptors and eagles are tolerant of human activities in other locations. Measures for their protection seem strict.

NPS Response: The planning team re-evaluated the closure for eagles, considering the time of year and use levels, and this closure was dropped.

It has been documented many times that human disturbance can cause raptors to abandon their nests. It is especially important that raptors listed under the Endangered Species Act be protected from disturbances.

Comment: The NPS must close Salt Creek to vehicle use because the endangered southwest willow flycatcher has been found there.

NPS Response: The Southwest Willow Flycatcher was observed in Squaw Creek Canyon, not Salt Creek. Salt Creek has not yet been surveyed for the species. (The flycatcher is a proposed endangered species.) No actions have been proposed that are believed to disturb this species.

Comment: There is no discussion of the measures that will be taken to ensure an adequate buffer zone around Mexican Spotted Owl and Peregrine Falcon nests.

NPS Response: Managers at Canyonlands National Park and Glen Canyon National Recreation Area have chosen not to advertise locations of the nests of these raptors by closing areas around the nests at this time. Nests should be adequately protected by regulations governing uses of the areas in which they are located. If conflict between visitor use of an area and nesting raptors develops, areas may be closed to use in the future.

Vegetation

Comment: The plan makes no mention of current or proposed exotic plant controls.

NPS Response: Exotic plant control is discussed in the respective Resource Management Plans of the park and recreation area. It is not a topic directly related to activities proposed in the Backcountry Management

Plan.

Comment: Too much emphasis is placed on the effects of trampling crusts and soils. There is no data in the proposal to show the specific effect of trampling or the extent of the problem.

NPS Response: Soils in Canyonlands are highly compactible. Trampling increases compaction, which in turn reduces water infiltration into soils. This decreases moisture available to vascular plants for growth. Trampling also decreases soil microbial populations, which are important for keeping nutrients available for vascular plant growth. Soil crusts, essential for reducing both wind and water erosion, are also destroyed by trampling. There are many published and unpublished data sets supporting these findings (see, for example, Belnap, 1993, 1992, and 1990, and Belnap and Gardner, 1993).

Comment: Relict areas chosen for closure are the most accessible and heavily visited. Impacts to these relict areas are subjective.

NPS Response: Impacts to all relict areas in the park are highly visible. Multiple trails, trampling, invasion of exotic plants, etc. are visible to visitors, as well as scientists studying the relict areas. The two areas selected for closure, out of the many relict areas identified by the Nature Conservancy, were indeed chosen based on amounts of visitation. See the section on relict areas for more information.

Water, Floodplains, and Night Sky

Comment: Adequate data was not presented to show that human use of water sources has been damaging.

NPS Response: Specific data on impacts of visitors on Canyonlands water sources are lacking for the planning area, although pollution of water sources by human use in other areas is well documented. A goal of the Resource Management Division of the park is to determine impacts from human use of water sources. Until such studies are funded, the rules will remain on the conservative side for the protection of wildlife.

Comment: The broad definition of floodplain, causing campsites to be closed, should be re-evaluated.

NPS Response: Floodplains are closed to campsites in NPS Management Policies and Executive Orders 11888 and 11900. The definitions are set by NPS policy, not park staff or the planning team. Floodplains in the backcountry were identified by professional hydrologists who identified 100 year, 500 year, and maximum possible floods based on standard hydrological definitions.

Comment: Protection from lights and glare for night sky viewing was not addressed.

NPS Response: These are significant resources in Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area. Protection of the night sky has been addressed in the Resource Management Plans for the park and recreation area, and actions taken in the Backcountry Management Plan will not impact these resources.

CULTURAL RESOURCES

Comment: Without a complete inventory, the NPS cannot know what its cultural resources are, the extent of impacts and the best ways to manage these resources.

NPS Response: Less than 2 percent of the planning area has been inventoried for cultural resources, making it difficult to plan or manage for long-term preservation of significant resources. However, for the last 8 years, a program has been in place to monitor the most heavily visited sites in each district. Based on this data, visitor impacts are well known, and a number of management strategies are being developed based on these data, as well as on management data from cultural sites around the world (e.g. Gale and Jacobs, 1987 and 1986).

SOCIAL RESOURCES

Comment: The social data presented are inadequate.

NPS Response: Quantitative data specifically gathered on visitors to the planning area are quite limited; however, years of watching and working with visitors to the planning area provides sufficient data to develop alternatives and select management solutions. The NPS intends to continue and expand the gathering of data on visitor use in the backcountry.

Comment: The charts showing growth in visitation are misleading. Five years of data are too few, and data for Figure 1 should be described as linear rather than exponential.

NPS Response: A primary reason for using only figures from recent years is to ensure that the method of calculating total visitation has not changed. The further back the data points, the greater the likelihood that different multipliers were used to obtain the total numbers. A least-squares regression equation showed the best fit was a third-order polynomial with a coefficient of determination of 0.990. The straight line (linear growth) curve fit had a weaker coefficient of determination of 0.938.

Comment: The NPS does not have to regulate based on people's impact on people. This plan relies heavily on a vague definition of solitude and an assumption that not enough solitude exists.

NPS Response: The NPS is mandated to provide for a high quality visitor experience. This includes limiting intensity of use in frontcountry campgrounds, providing for backpacking campsites away from other parties, regulating group size, and restricting pets. Visitor impacts on other visitors are greatest in areas of heavy use, such as overlooks and short interpretive trails, and the backcountry should provide an alternative experience.

Canyonlands National Park and Orange Cliffs Unit of
Glen Canyon National Recreation Area

Backcountry Management Plan



January 6, 1995

Canyonlands National Park and Orange Cliffs Unit of
Glen Canyon National Recreation Area

Backcountry Management Plan

January 1995

Canyonlands National Park
2282 South West Resource Boulevard
Moab, Utah 84532

801-259-3911

EXECUTIVE SUMMARY

PROJECT: Backcountry Management Plan

LOCATION: **Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area (Utah)**

SUMMARY OF ACTION: The goal of this plan was to develop backcountry management strategies to protect park resources, provide for high quality visitor experiences, and be flexible to deal with changing conditions. Annual visitation to Canyonlands quadrupled between 1984 (105,646 visitors) and 1993 (434,844 visitors). As a result, resource impacts have increased and the quality of the visitor experience has diminished.

The planning process began in 1992 by inviting the public to identify what issues and topics should be addressed in the plan. A Notice of Intent to prepare the plan was printed in ***the Federal Register***. Scoping questionnaires were distributed and responses analyzed. Thirty-eight issues were identified. A newsletter was prepared and sent to interested parties and six public meetings were held in Utah and Colorado in late 1992 seeking input on how to address those concerns. Over 200 responses were received by February 1993. A draft plan and environmental analysis was prepared and over 2,000 copies were distributed beginning in December 1993. Six additional public meetings and numerous presentations to groups were made. The comment period closed March 5, 1994 with 2,235 written comments received. Comments were analyzed throughout 1994 and the final plan prepared in December 1994.

MAJOR DECISIONS:

--Nineteen backcountry zones will be established for overnight backpacking use. Only three of the zones will have designated backcountry campsites; all other zones will allow at-large camping. Limits will be placed on the number of permits issued for each zone for any given night. A total of 63 backpack permits will be available each night.

--Backcountry permits will be required for all overnight use (including camping with a vehicle), day use with pack and saddle stock, and day use in Salt Creek and Horse and Lavender canyons. Rock climbing day use will not require a permit.

--A backcountry reservation system will be implemented in early 1995 to accept advance reservations for overnight backpacking, backcountry vehicle sites and, eventually, day use in Salt Creek and Horse and Lavender canyons. An appropriate reservation fee, depending on activity, will be charged to off-set costs of establishing the unfunded reservation office and maintaining backcountry facilities, primarily vault toilets at vehicle sites.

--Limits will be placed on how long backcountry campers can stay in any one zone (7-10 days) with a limit of 14 consecutive days per trip allowed.

--Group size limits will be applied to all backpacking groups no matter what the nature of the party. Island in the Sky (Island) District and Needles District will allow 7 per party; Maze District will allow 5.

--Group size limits will be applied to all vehicle sites. Island will allow 15 persons and 3 vehicles per site. Needles will allow 10 persons and 3 vehicles. Maze will allow 9 persons and 3 vehicles. A group site allowing 16 people and 5 vehicles will be established at Flint Seep (Orange Cliffs). Vehicle campers must use designated sites. There are 52 vehicle sites available nightly.

--Few areas will be closed to camping or entry. Closed to camping will be areas below and visible from Maze Overlook, Pete's Mesa (Maze), Horseshoe Canyon (detached unit), and day use zones in the Island and Needles. Areas closed to entry are Virginia Park (Needles), Jasper Canyon (Maze), and critical bighorn sheep habitat in the Needles between May 1 and September 1.

--Guided walks will be offered but participation will not be required, at this time, to enter Horseshoe Canyon (detached unit). Any group will be limited to 20 in Horseshoe Canyon unless with a NPS Park Ranger.

--Wood fires will be prohibited throughout the backcountry. Fire grates will be removed. Wood gathering will continue to be prohibited. Charcoal fires will be allowed at designated backcountry vehicular sites within a fire pan provided by the camper. Ashes and charcoal must be carried out.

--Several road closures will be implemented. Murphy Point Road (Island) will be closed (approximately 0.5 miles) at the current trailhead. Cyclone Canyon Road (Needles) will be closed. Davis Canyon Road (Needles) will be closed (approximately 3 miles) at the park boundary with a designated parking area. Salt Creek Road (Needles) will remain open to the current Angel Arch parking area; however, the 0.5 mile section from Angel Arch to Bates Wilson Camp will be closed.

--Several roads will have limited vehicle access including Salt Creek and Horse and Lavender Canyons. Access will be controlled by locked gates. Day use permits will be required and allow 10 private vehicles, 2 commercial vehicles, 7 bicycles, and 7 pack or stock animals per day in the Horse/Salt area. In Lavender Canyon, the same will apply except that 8 private vehicles will be allowed per day.

--Backcountry toilets will be maintained, for the time being, in the Needles and Island at vehicle sites, and Lathrop Canyon day use area (Island). In the Maze, since backcountry toilets cannot be satisfactorily maintained, vehicle users will have to carry out their solid human waste as do all river runners currently. Burying of solid human waste will be allowed for backpackers, however, they must carry out their toilet paper.

--Trash or garbage cans will not be provided in the backcountry.

--Generators will not be permitted in the backcountry and acceptable noise levels have been established for the backcountry.

--Pets will be prohibited in all backcountry areas.

--Only horses, mules and burros will be permissible pack and stock animals. Llamas and goats will not

be permitted. No commercial pack or stock use will be allowed. Stock will be allowed only on park roads, with some exceptions in the Orange Cliffs area. Overnight trips using stock will be allowed to use vehicle campsites. **Pelletized** feed must be used 48 hours prior to and during any trip. Future restrictions may be necessary if information indicates domestic stock disease may threaten wildlife populations such as bighorn sheep.

--Technical rock climbing will be allowed in most areas of the park. Climbing and canyoneering will be free or clean aid climbing. No new fixed protection will be allowed except on existing routes where unsafe existing protection can be replaced. Motorized drills are prohibited.

--Areas closed to rock climbing include: Salt Creek (Needles) Archeological District, Horseshoe Canyon (detached unit), or any named arch or bridge on USGS maps except Washer Woman Arch (Island). Climbing, ascending, descending, or traversing any archeological or cultural site is prohibited.

--Vehicles must stay on designated roads. Vehicles and drivers must meet Utah State Licensing requirements. ATV's are not permitted in the park.

--Bicycles, including mountain bikes, are considered vehicles, hence, all regulations applying to motor vehicles apply to bicycles.

--Certain archeological sites will not have their locations disclosed to the public as allowed for in federal law. Visiting archeological sites will be permitted but, entering archeological structures is prohibited by Federal law and will be strictly enforced.

--Caching, but not burying, of food and water for extended backcountry trips will be allowed with written permission of the District Ranger.

--The plan is expected to guide the management of the backcountry of Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area for at least five years and may be reviewed and updated as needed.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
I. INTRODUCTION	1
A. PURPOSE AND SIGNIFICANCE	1
B. PLANNING AREA DEFINED	2
C. BACKCOUNTRY DEFINED	2
D. THE PLANNING PROCESS AND NEPA	2
II. VISITOR ACTIVITIES AND MANAGEMENT SOLUTIONS	3
A. ZONING..	3
B. RESERVATION AND PERMIT SYSTEM	3
C. AIRCRAFT AND OVERFLIGHTS	3
D. BICYCLEUSE	5
E. CACHES..	5
F. CAMPING..	5
1. Permits and reservations	5
2. At-large and designated campsites	5
3. Number of nights campers may remain in a zone	7
4. Overnight parking	7
5. Group size	7
6. Vehicle and bicycle camping	8
7. Areas closed to camping	8
G. CLOSURES..	9
1. Closures of critical bighorn sheep habitat, Needles District	9
2. Closures of relict areas, Needles and Maze Districts	9
3. Restricted use of the Doll House, Maze District	9
4. Restrictions on roads	9
H. DAY USE	10
1. Day use of vehicles and bicycles	10
2. Day hiking	10
3. Dayuseofpackandsaddlestock	11
I. COMMERCIAIUSE	11
J. EDUCATION	11
K. FACILITIES	12
1. Fires	12
2. Roads	12
3. Signs	15
4. Picnic Tables	15
5. Toilets and human waste	15
6. Hiking Trails	16
7. Trash and garbage cans	16
L. NOISE	16
M. OFF-SEASON USE	16

N. PETS	16
0. PACKANDSADDLESTOCKUSE	17
1. Pack and saddle stock in Horseshoe Canyon	18
2. Pack and saddle stock in the Orange Cliffs	18
3. Grazing permittees in the Orange Cliffs	18
P. TECHNICAL ROCK CLIMBING AND CANYONEERING	18
Q. VEHICLES	19
R. WATER USE	20
III. MANAGEMENT ACTMTIES	21
A. CULTURAL RESOURCE PROTECTION	21
1. Site disclosure	21
2. Entering archaeological and cultural sites	21
B. EMERGENCY SERVICES	21
C. WILDERNESS ANDSOLITUDE	22
D. UPDATINGTHEPLAN	22
IV. REFERENCES	23
V. LISTOFPREPARERSI.....	25
APPENDIX A: FINDING OF NO SIGNIFICANT IMPACT	27
APPENDIX B. THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS F O R T H E P L A NI.....	30
APPENDIX C. BACKCOUNTRY PERMIT RESERVATION SYSTEM	34
APPENDIX D. COMMERCIAL USE	35
APPENDIX E. DESIGNATED BACKCOUNTRY VEHICLE AND BACKPACK CAMPSITES	38
APPENDIX F. RESPONSE TO SUBSTANTIVE COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL ASSESSMENT	41

LIST OF TABLES

Table 1.	Total Number of Overnight Permits per Zone per Night	4
Table 2.	Zones with Designated Backpack Campsites	6
Table 3.	Regulations for At-large Campsite Selection	6
Table 4.	Maximum Group Sizes for Camping by District	8
Table 5.	Allocations for Areas with Restricted Day Use	14
Table B.1.	Numbers and Types of Commentors	32
Table B.2.	Type of Response	32
Table D. 1.	Total Number of Backcountry Permits Allocated to Commercial Vehicle and Bicycle Operations Per Day or Night	36
Table D.2.	Total Number of Overnight Permits Allowed for Commercial Backpack Concessionaires Per Night Per District	36
Table E. 1.	Designated Vehicle Campsites, Limits and Facilities	38
Table E.2.	Zones With Designated Backpacking Campsites (no facilities are provided)	40

LIST OF FIGURES

Figure 1.	Canyonlands Visitation by District, 1980-1991	1
Figure 2.	Map of Zone Boundaries, Day Use Areas, and Closures	Centerfold

I. INTRODUCTION

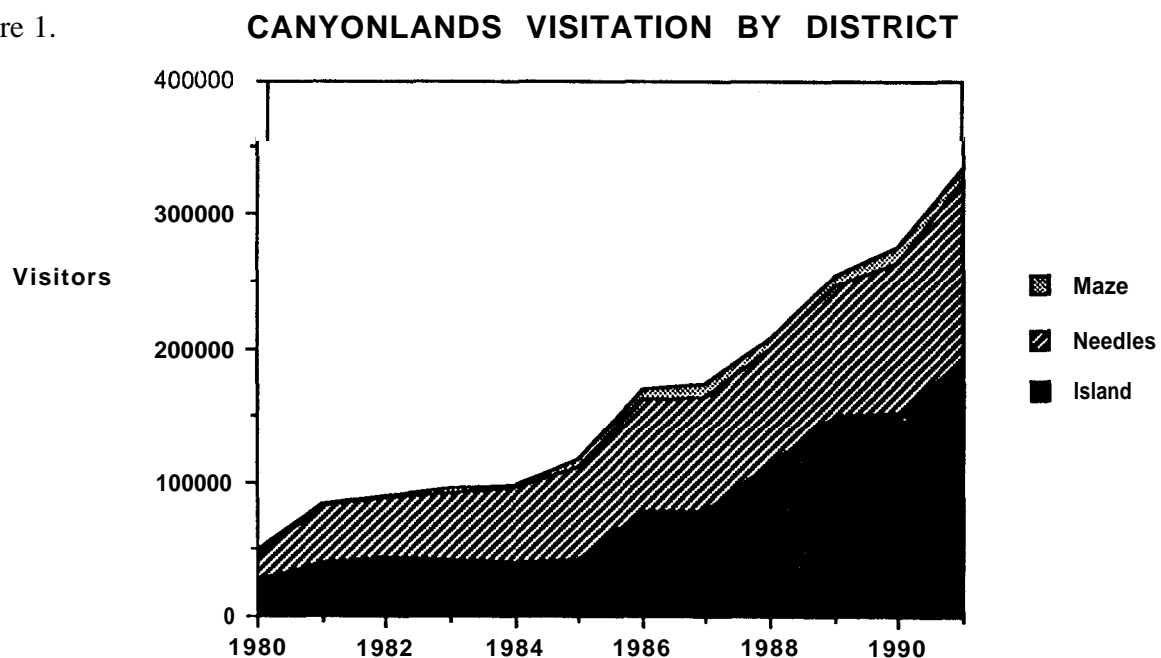
A. PURPOSE AND SIGNIFICANCE

Canyonlands National Park was established by Congress "to preserve an area . . . possessing superlative scenic, scientific, and archeological features for the inspiration, benefit, and use of the public . . ." (Public Law 88-590, 1964). The House of Representatives report accompanying this law describes Canyonlands: "Nowhere else is there a comparable opportunity to view a colorful, exciting, geologically significant wilderness from above, and then get down into its midst--and still not lose the atmosphere of remote wilderness. " (U.S. House of Representatives, 1964). Canyonlands' backcountry is significant as one of the last, large, relatively undisturbed areas of the Colorado Plateau.

Within the scope of the enabling legislation for Glen Canyon National Recreation Area, the Orange Cliffs Unit is to be "maintained as a critical backdrop for Canyonlands National Park and as a major vantage point for spectacular views into the park." The Orange Cliffs are to be managed "to maintain a relatively primitive, undeveloped atmosphere," and to provide "year-round access to Panorama Point" (U.S. Department of Interior, National Park Service, 1979).

Whether on foot, bicycle, or in vehicles, many visitors come to Canyonlands National Park to experience solitude and enjoy the natural beauty. Annual visitation to Canyonlands has quadrupled in recent years, from 105,646 in 1984 to 434,844 in 1993, and this trend is expected to continue (see figure 1). Of the 396,911 visitors entering Canyonlands in 1992, over 15,600 spent one or more nights in the backcountry. As a function of this rise in annual visitation, adverse impacts to Canyonlands' resources have increased and the opportunities to experience solitude have decreased. Since the mandate of the National Park Service (NPS) is to balance visitor access to the parks with preservation and protection of natural and cultural resources, rising visitation to Canyonlands has necessitated this new Backcountry Management Plan.

Figure 1.



B. PLANNING AREA DEFINED

The planning area is made up of three districts of Canyonlands National Park (337,570 acres): the Needles, Island in the Sky, and Maze districts, and the Orange Cliffs Unit (75,200 acres) of Glen Canyon National **Recreation** Area as far south as Clearwater Canyon (Figure 2). The total planning area comprises 412,770 acres. This plan does not cover the River District of Canyonlands, nor Glen Canyon Recreation Area beyond the Orange Cliffs.

This plan identifies backcountry management actions to address the problems affecting the three districts of Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area. The Orange Cliffs Unit is included in this plan because the area adjoins Canyonlands National Park, is similar in physiography, and is experiencing many of the same problems with growing visitation. Thus, to increase consistency and protection for visitors to both **the** Maze District of Canyonlands and the Orange Cliffs in Glen Canyon, the Orange Cliffs will be managed in the same manner as **the** Maze District, with the exception of mandated differences such as grazing in the Orange Cliffs.

C. BACKCOUNTRY DEFINED

Backcountry is defined as all land in the planning area except (1) two-wheel drive roads (paved or dirt surfaces) and their adjacent shoulders, ditches and culverts, (2) administrative buildings and their immediate surroundings, and (3) the Squaw Flat and Willow Flat Campgrounds. Backcountry includes all four-wheel-drive roads, and the Shafer Trail below the Shafer day use parking area.

D. THE PLANNING PROCESS AND NEPA

This plan was prepared in full compliance with the National Environmental Policy Act (NEPA) (Public Law 91-190, 1969) and its implementing regulations (40 CFR Parts 1500- 1508). Thirty-eight issues and concerns were identified by the public and park staff to be addressed by the planning effort. Visitor activities and management solutions to address these issues follow. Visitor activities not otherwise mentioned, such as fishing, will continue according to existing policy. Appendix B describes the steps taken to follow the NEPA process. Existing and new regulations included in **this** plan are according to Title 36 of the Code of Federal Regulations (36 CFR).

II. VISITOR ACTIVITIES AND MANAGEMENT SOLUTIONS

A. ZONING

The backcountry of each district has been divided into zones, with a number of backcountry use permits per night set for each zone. Zone boundaries are illustrated in Figure 2 and zone permit allocations are listed in Table 1. Vehicle and bicycle parties will camp at designated campsites. Camping for backpacking will either be at-large or designated, depending on the zone. See CAMPING below for details on overnight stays in the backcountry.

Backcountry zones were defined based on fragility and uniqueness of resources and recreational opportunities, historic and projected visitation, importance to visitors, and potential ranges of visitor experiences. Initially 66 zones were identified in the draft plan. The public indicated that these 66 separate zones were hard to locate in the field, too complicated, and too confusing. The staff indicated that **these** zones were so small that they forced visitors into areas **they** had no desire to visit. Consequently the zone boundaries have been consolidated into 19 zones. With these larger zones, visitors can travel to preferred destinations within zones without impacting non-target areas.

Since zoning provides the crux of the solution to backcountry management problems, visitor impacts will be monitored to ensure that park resources are not damaged as a result of changes in use patterns, or **that** visitors do not have consistently unsatisfactory experiences due to crowding or other negative social interactions. If this occurs, zone boundaries will be altered.

B. RESERVATION AND PERMIT SYSTEM

Backcountry use permits are required for all overnight stays in the backcountry, day use of pack and saddle stock, and vehicle day use in Salt Creek and Horse and Lavender Canyons. Due to the limited number of permits available for most of these activities, a reservation system will be available. Reservations for backcountry use permits will begin in January 1995. Fees will be charged to offset administrative costs. See Appendix C for information on the reservation system. Permits will no longer be required for technical rock climbing (see TECHNICAL ROCK CLIMBING AND CANYONEERING below).

C. AIRCRAFT AND OVERFLIGHTS

The Federal Aviation Administration advises pilots to maintain an altitude of at least 2000 feet above ground level over all national parks. Noise from low flying aircraft adversely impacts both wildlife and park visitors. Ground level or ground surface is defined as the highest terrain within 2,000 feet laterally and vertically of the flight route at all times. Powerless flights (e.g. gliders, hang gliders, paragliders, etc.) are prohibited.

Table 1. Total Number of Overnight Permits per Zone per Night

ZONE NAME	# OF BACKPACK PERMITS	# OF VEHICLE PERMITS
ISLAND DISTRICT TOTAL	14	20
Day Use Area	0	0
White Rim	0	19
Taylor Canyon	4	1
Syncline	1*	0
Upper West Basins	3	0
Lower Basins	2	0
Gooseberry / Lathrop	3	0
Murphy Point	1	0
NEEDLES DISTRICT TOTAL	34	12
Day Use Area	0	0
Davis & Lavender	2	0
Upper Salt	4*†	0
Salt & Horse	4	2
Butler / West Side Canyons	2	0
Red Lake / Grabens	5	10
Needles Trails	16*	0
Needles North	1	0
MAZE & ORANGE CLIFFS TOTAL	15	20
Maze Area	11	11
Orange Cliffs	1	3
High Spur	3	6
CANYONLANDS & ORANGE CLIFFS TOTAL	63	52

* These **backpack** areas have designated campsites, all other zones have at-large camping

† 6 sites may be designated for 4 permits to facilitate travel plans.

D. BICYCLE USE

Bicycles are classified as vehicles so all regulations applying to motor vehicles apply to bicycles. Bicycles are allowed on all roads designated as open to vehicular traffic. Lights are required for night-time use of bicycles. Bicycles are not allowed on hiking (foot) trails.

E. CACHES

Caching water and food supplies for extended backcountry trips will be allowed in Canyonlands **with** written permission of the district ranger and as stipulated on the backcountry permit. No damage to resources, such as burying, will be allowed in securing a cache. The date the cache will be collected and the name and address of the owner must be clearly visible on the cache. If the cache is not picked up within 30 days of the ending date of the backcountry permit or the date on the cache, park rangers will bill the owner for cleanup costs and issue a violation notice and fine for abandoning property.

F. CAMPING

1. Permits and reservations

All overnight uses of the backcountry require a backcountry use permit. Permits will be available by advance reservations. Any unallocated visitor use permits remaining in a zone or any canceled permits will be available to visitors walking into district visitor centers on a first-come, first-served basis. See Appendix C for information. The maximum stay per permit is 14 nights. Overnight use in **the** backcountry will be within the minimum impact regulations and restrictions listed in Table 3.

2. At-large and designated campsites

Camping is either **at-large**, or **in designated campsites**, as defined below. See Table 1 and Figure 2 for at-large or designated-campsite zones.

Designated cammmites. A designated campsite is one for which boundaries or perimeters are delineated with four wood posts by NPS staff. All vehicle and bicycle overnight camping is at designated campsites. Appendix E contains a list of all designated vehicle campsites. Backpack camping is designated in some zones; see Table 2. **In** zones where campsites are designated for backpackers, and for all vehicle and bicycle campers, backcountry users may not select at-large campsites but must use designated sites. In designated campsites, sleeping and cooking areas must be within the NPS-delineated perimeters.

Campsites are designated to keep intensive use to previously disturbed areas, to clarify locations where camping is acceptable, or to limit adverse impacts to resources and other campers. Also, traditional designated vehicle campsites that had been located in flood plains have been closed for increased visitor safety as directed in Executive Orders 11988 and 11990. The former camping areas that are now closed

were all located in Salt Creek in the Needles District: Bates Wilson Camp (one site), Angel Arch Camp (two sites), and the three creek-level campsites at Peekaboo. The two upper Peekaboo campsites will remain open. Three new campsites have been opened on the four-wheel drive roads behind Elephant Hill to **accommodate** visitors displaced by this closure. A few administrative campsites may be established to facilitate backcountry ranger patrols, park maintenance, resource management and administrative use.

Table 2. Zones with Designated Backpack Campsites

DISTRICT	ZONE NAME	NUMBER OF CAMPSITES
Island in the Sky	Synchrone	1
Needles	Needles Trails	16
Needles	Upper Salt	4*

*Six campsites may be designated to facilitate travel, but only four overnight permits will be issued on any one night.

Table 3. Regulations for At-large Campsite Selection

<p>At-large Campsites must be:</p> <ul style="list-style-type: none"> - 300 feet from water sources, including seeps, potholes, springs, and streams; the Green and Colorado Rivers are exceptions - 300 feet away from all prehistoric or- historic cultural sites, including alcoves, rock art, surface scatters of lithics or ceramics, partial or complete structures or ruins - at least one mile from trail heads or roads (including four-wheel-drive roads) - within the zone for which the permit was issued - in areas open to at-large camping - left with the least possible evidence of use and the least possible environmental degradation - accessed by the least impacting route, i.e, visitors should use washes or rock surfaces to reach campsites - selected on rock surfaces, previously disturbed areas, or surfaces without cryptobiotic soil crusts or vegetation
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At-large campsites. In zones where campsites have not been designated, backpackers may choose their own campsites. This is referred to as at-large camping. At-large campsites will be selected by campers based on the minimum impact camping regulations in Table 3. The former regulation requiring campers to be out of sight and sound of the trail has encouraged off-trail travel and resource damage; consequently, this regulation has been eliminated. Vehicle campers may not camp at-large.

3. Number of nights campers may remain in a zone

A backcountry camper may spend up to seven consecutive nights per zone in the Needles and the Island in the Sky districts. Due to the large size of the Maze District zones and the difficult logistics, a backcountry camper may spend ten consecutive nights per zone in the Maze District. After seven nights in a Needles or Island in the Sky zone, campers must move to another zone. After ten nights in a Maze or Orange Cliffs zone, campers must move to another zone. A backcountry use permit may be issued for up to 14 consecutive days.

4. Overnight parking

Overnight parking is allowed at designated trailheads or in designated campsites. Parking vehicles at other locations along designated roads is allowed, but the location must be written on the backcountry use permit. Vehicles must be parked off of the road surface no further than necessary to allow another vehicle to pass. Drivers must choose a parking location which damages the least amount of vegetation and soil. Use of existing pull-outs and parking areas is encouraged.

Overnight parking in the Salt Creek/ Horse Canyon Zone is allowed only at Peekaboo and the Upper Salt trailhead parking areas (located at the former Angel Arch camping area).

5. Group size

Backpacking group sizes. Maximum backpack **camping group size is seven people in the Island in the Sky and Needles Districts, and five in the Maze District and Orange Cliffs Unit.** See Table 4 below. When larger groups split up to meet the group camping size limits, each subgroup must be equipped as a self-sustaining group. Each division of a larger group must have the ability to treat their own water, cook their own food, etc., and must camp at least one mile apart from other divisions of the group in **at-large** camping zones, or at different sites in the designated campsite zones. At **this** time, there are no limits to group size for day users; groups that have split up to camp may come together for daytime activities.

Vehicle camping group sizes. Three vehicles per group are allowed in all designated vehicle campsites in all districts. The maximum number of people per vehicle campsite is 15 in the Island in the Sky, ten in the Needles, and nine in the Maze and Orange Cliffs. One campsite, Flint Seep in the Orange Cliffs Unit, is a group site that holds up to 16 people and five vehicles to facilitate use by larger groups. See Table 4 below.

The permitted group size varies by zone to provide a range of alternative social experiences, to manage for differing levels of resource sensitivity, and to **accomodate** trip logistics. Group size for backpackers and vehicle campers in the Maze and Orange Cliffs is smaller than in the other districts to provide for the greatest solitude and the most remote camping experience in **the** planning area. This mandate for the Maze district is spelled out in the 1978 General Management Plan which directs that the Maze be managed as “a rugged wild area with remoteness and self-reliance the principal elements of the visitor experience. ”

Table 4. Maximum Group Sizes for Camping by District

DISTRICT	VEHICLE CAMPSITES	BACKPACK CAMPING
Island	15 people, 3 vehicles	7 people
Needles	10 people, 3 vehicles	7 people
Maze and Orange Cliffs	9 people, 3 vehicles 16 people, 5 vehicles at Flint Seep Group Site	5 people

6. Vehicle and bicycle camping

All campsites for vehicle and bicycle camping are designated campsites as described above. This includes the Orange Cliffs Unit. Locations of designated vehicle and bicycle campsites within each of the zones are shown in Figure 2. Maximum stay at a campsite is three (3) nights. See also Overnight Parking, above.

7. Areas closed to camping

The following areas are closed to camping (see Figure 2):

- Day use zones in the Island in the Sky and Needles Districts, except in the Squaw Flat and Willow Flat campgrounds.
- Zones with designated backpack campsites.
- Areas below and visible from the Maze Overlook.
- Pete’s Mesa.
- Horseshoe Canyon.
- ‘Areas closed to entry (Virginia Park, Jasper Canyon and the critical bighorn sheep habitat in the Needles District - see CLOSURES below).

G. CLOSURES

1. Closures of critical bighorn sheep habitat, Needles District

Lower Big Spring and Lower Little Spring Canyons, Lower Salt Creek, and Lower Elephant Canyon will be closed to all human entry from May 1 to September 1. See Figure 2 for boundaries. These canyons are important desert bighorn sheep habitat, but the canyons are especially narrow with little escape terrain for bighorn sheep. The bighorn sheep population in the Needles District is declining, with only an estimated 40 sheep remaining. Lamb survival has been minimal with only one to two lambs surviving per year for the past two to three years. The closure is intended to minimize disturbance to lambs. If the bighorn population recovers, this closure will become less restrictive.

2. Closures of relict areas, Needles and Maze Districts

Relict areas in Canyonlands National Park and Glen Canyon National Recreation Area are defined by the Nature Conservancy as “small places with pristine plant communities... where topography has kept out motor vehicles and livestock grazing” (Van Pelt et al., 1992). Since there are so few of these areas in the arid west, preservation of the few remaining relict areas allows biologists to assess the impacts of human activity on native biota. Unfortunately, even trampling by visitors can alter the biota.

Jasper Canvon (Maze District). Entry into Jasper Canyon from the Green River is allowed for the first quarter mile (to the Jump). Entry for non-scientific uses is prohibited beyond this point. Views into Jasper Canyon will be possible from many locations along the canyon rim.

Virginia Park (Needles District). The grasslands of Virginia Park (approximately 203 acres) will be closed to all non-scientific entry. Views into Virginia Park will still be possible from rock formations around the grasslands. At least once a year the NPS will conduct a guided tour of Virginia Park for all interested members of the public. Wash bottoms and rock will be used as travel routes.

Scientific research in Virginia Park and Jasper Canyon may be conducted only after receipt of a written research permit.

3. Restricted use of the Doll House, Maze District

To reduce impacts from trampling and multiple trailing, only designated trails may be used when hiking from the river through the Doll House area of the Maze District. Trail marking will be upgraded to facilitate use of designated trails. Backcountry permits are required for overnight stays in this area.

4. Restrictions on roads

For information on road closures and restrictions, see the section on roads under FACILITIES, below.

H. DAY USE

Day use permits are required for all pack and saddle stock use, and for those backcountry roads with day use limits (the Salt Creek and Horse Canyon area and Lavender Canyon). For an explanation of these roads, see “Roads” in the section on FACILITIES, below. Where day use permits are limited in number they will be available through the advanced reservation system. See Table 5 below for the limits.

Regulations or restrictions of day use may be implemented where logistical problems develop (for example, where parking is limited or unsafe numbers of vehicles are using one-lane roads). Additional rules may also be imposed if significant resource damage occurs as a result of unregulated day use. Future planning efforts will address the impacts of day use on park resources.

1. Day use of vehicles and bicycles

Numbers of day users in vehicles and on bicycles will not be limited, except as shown in Table 5 below. Vehicles and bicycles must stay on NPS designated roads at all times. Hiking trails are not open to bicycle use.

2. Day hiking

Numbers of day hikers and size of hiking groups will not be restricted except in Horseshoe Canyon (see below). Day hikers are encouraged to stay on designated trails or roads at all times. Foot travel through areas without trails should be in wash bottoms and on rock surfaces to avoid damaging vegetation and soil crusts. Parking for day hiking is available at trailheads. When necessary, vehicles may also be parked along backcountry roads. Vehicles should be pulled off the roadway just far enough to allow another vehicle to pass. Drivers should choose a location which damages vegetation and soil crusts to the least degree possible. Use of existing pull-outs and parking areas is encouraged.

Horseshoe Canyon. Overnight camping is prohibited in Horseshoe Canyon. Guided tours will be offered during the high use season and a ranger will continue to be stationed at the canyon. Barriers will be installed to keep visitors from inadvertently damaging rock art. Interpretive displays at the west rim parking area will be available. When staffing levels permit, entry to Horseshoe Canyon will be by guided tour only.

The maximum group size for private parties hiking through Horseshoe Canyon will be 20 people. Private groups larger than 20 may arrange for a special guided walk, or must break into smaller groups. Special guided walks may be arranged with the Maze District staff or **through** the Park Archaeologist.

Horseshoe Canyon was added to Canyonlands National Park to help preserve and protect four magnificent and irreplaceable prehistoric Native American rock art panels. While deliberate vandalism has been rare since the rock art was added to the park, unintentional damage from visitors touching it and stirring up dust and silica particles has increased in direct proportion to the number of visitors. Smaller group sizes will reduce the amount of silica and dust impacting the sites.

3. Day use of pack and saddle stock

All pack and stock users must obtain a backcountry use permit for day use. Day use permits are unlimited and free of charge, except in Salt Creek, Horse Canyon and Lavender Canyon (see Table 5), where day use is limited to seven (7) animals per day. In these areas, permits are available through the reservation system and a fee is required. In all other areas of the park, including Horseshoe Canyon, group sizes are limited to ten (10) animals and ten (10) people per party.

See PACK AND SADDLE STOCK USE for other regulations.

I. COMMERCIAL USE

A commercial trip or operation is defined as a trip where actual costs are not shared equally by all participants, profit is a goal of the trip, or there is public advertising for participants. Commercial use is regulated according to the mode of transportation used in the backcountry. Definitions, regulations, and the specifics for managing commercial use are outlined in the Commercial Visitor Services Management Plan for Arches National Park, Canyonlands National Park and Natural Bridges National Monument. All commercial operations must have authorization from the Superintendent of the park(s) in which operations will take place, prior to offering any services in the park. Those commercial operations which extend into **both** Canyonlands and Glen Canyon must be authorized by the Superintendent of Canyonlands, subsequent to **the** agreement of the Superintendent of Glen Canyon. See Appendix D for regulations and use allocations specific to commercial uses. Commercial operations (park concessionaires) in existence have been determined to be necessary to provide the opportunity for some visitors to enjoy the park in a way they are not prepared to accomplish on their own.

J. EDUCATION

Education is a very important tool in managing backcountry use. Public education is used to reduce impacts and encourage compliance with park regulations. A variety of means will be used to heighten visitors' knowledge of minimum impact use of both front country and backcountry. Some of the educational strategies to be implemented are listed below.

- New exhibits in the visitor centers at Needles (1995), Island in the Sky (1993), and Bullfrog educate visitors on the protection of park resources while interpreting the region's natural and cultural history.

- New wayside exhibits located primarily at the trailheads in the Needles will stress protection of cryptobiotic soil crusts and cultural resources.

- Canyonlands National Park plans to revise or replace, based on availability of funding, the current minimum-impact video, making the program more specific to the regulations and policies of backcountry travel in Canyonlands.

-Canyonlands National Park will reinstitute an NPS visitor newspaper with sections on resource protection and backcountry use.

-A review of all current literature offered to park visitors will be conducted to determine if messages can be strengthened.

-Rangers will continue to personally issue backcountry permits and require backcountry parties to be familiar **with** policies and regulations. The expansion of the backcountry reservation system will allow communication of more information to visitors prior to their trip so they will arrive better prepared and with a clearer understanding of park rules and regulations.

-A new "Guide to Canyonlands National Park" (sales item) is being planned for 1996 by Canyonlands Natural History Association that will emphasize appropriate use and protection of features.

-Permit talks are given to backcountry groups prior to departure.

Other measures to educate visitors will be implemented as needed.

K. FACILITIES

1. Fires

Open wood fires are prohibited, and wood collecting is not allowed anywhere in the park. Fire grates will not be provided in the backcountry. Charcoal fires will be allowed at designated vehicle campsites only if visitors bring in and use fire pans. Users must pack out **fire** pans and all ash and charcoal. During periods of high fire danger, fire pans and charcoal fires may be prohibited. Beach campfires are not allowed by any backcountry permittee under this Backcountry Management Plan. Beach campfires of river runners are regulated by the River Management Plan.

Wood supplies are limited in Canyonlands and Orange Cliffs; trees grow slowly and are sparsely distributed. In regularly used areas, campfire burning can eliminate wood faster than it can be replaced by new growth. Both living trees and dead wood provide shade and shelter for many animal species as well as organic matter for the soil. The prohibition on wood fires will maintain the availability of these essentials.

2. Roads

Closures. The **Murphy Point Road** in the Island in the Sky District will be closed to vehicle traffic at the current trailhead. The closed portion of road (approximately one half mile) will become a hiking trail. **There** are few hiking opportunities in the Island in the Sky District that do not involve a strenuous climb down or up the **Wingate** cliffs. Closure of this segment of road will allow for an additional **mesa-**top hiking opportunity, and provide the only backpack camping on the Island in the Sky mesa top.

The Cyclone Canyon Road in the Needles District will terminate at the designated vehicle campsite. The closed portion of the road (approximately three and one half miles) will become a hiking trail. This road closure eliminates a section of road that has been scheduled for closure since the adoption of the 1978 General Management Plan. A parallel road in the adjacent Devil's Lane **graben** provides scenery and driving terrain similar to that in Cyclone Canyon, and the campsite located at the new end of the Cyclone Canyon road will be one of the most remote and isolated vehicle campsites in the Needles District.

Davis Canyon in the Needles District will be closed to vehicle traffic at the park boundary. The closed portion of the road (approximately three miles) will be open to foot travel. A designated parking area and vehicle turn-around will be established within the park boundary. This newly converted foot trail will provide the only designated hiking trail in the larger drainages on the eastern side of the Needles District where hikers can enjoy a canyon without vehicle traffic. In addition to providing undisturbed hiking opportunities, the road closure will allow the natural resources to recover from the impacts of **off-road** parking, and improve the setting at the cultural sites in the canyon.

The 0.5 mile segment of **the Salt Creek Road** in the Needles District from the junction with the Angel Arch spur road to the Bates Wilson Campsite will be closed to vehicular traffic. With the removal of Bates Wilson Camp, this segment of road is no longer necessary. A parking area is available at the former Angel Arch Camp for access to **the** Upper Salt zone and foot trail. There will be more parking available at this location than at the former trailhead south of Bates Wilson Camp.

Roads with limited access. **Salt Creek and Horse Canyon** four-wheel drive roads in the Needles District will remain open to vehicular traffic, but travel will be by backcountry use permit only. A locked gate at the north end of the road (the location of the current gate) will control access. Day use permits for Salt Creek and Horse Canyon will be limited to ten (10) permits for private motor vehicles (one vehicle per permit), two (2) permits for commercial motor vehicle tours (one vehicle per permit), one (1) or more permits for up to seven (7) private or commercial bicyclists, one (1) or more permits for up to seven (7) pack or saddle stock. See Table 5 below. All permits are available through the advance reservation system (see Appendix C). Unreserved permits or cancellations will be 'available to walk-in visitors.

Overnight use in vehicle campsites in the Salt Creek drainage will continue to be allowed at two Peekaboo campsites located on a bench out of the flood plain. All other campsites in the Salt Creek drainage were located in the floodplain and have been removed (see CAMPING above).

Visitors with backcountry use permits for Peekaboo campsites do not need day use permits for the Salt Creek and Horse Canyon area. Hikers with backcountry use permits for the Salt Creek and Horse Canyon or **the** Upper Salt zones may have vehicle access to Salt Creek and Horse Canyon as well, but overnight parking is only permitted at the Peekaboo camp or the Upper Salt trailhead parking (at the former Angel Arch camp).

Limiting the volume of traffic will begin to protect riparian and archeological resources in this ecologically and culturally important area. A monitoring program will be initiated to evaluate the effectiveness of this action.

Lavender Canyon in the Needles District will be gated at the park boundary. Day use permits will be issued to a limited number of vehicle, bicycle and horse users for day access into the area. This will provide an opportunity for park staff to educate visitors about resource concerns and to protect this special visitor experience from unlimited numbers.

Permits for day use in Lavender Canyon will be limited to eight (8) private motor vehicles (one vehicle per permit), two (2) commercial motor vehicles (one vehicle per permit), permits for up to seven (7) private or commercial bicyclists, and permits for up to seven (7) pack stock or saddle animals. See Table 5 below. All permits will be available through the advance reservation system (see Appendix C). Unreserved permits or cancellations will be available to walk-in visitors.

Backcountry roads will continue to be subject to seasonal and periodic closures due to flash floods, quicksand, ice, and other adverse driving conditions. These roads may be closed at the discretion of the District Ranger. Reservation fees are not refunded. Costs of towing vehicles due to breakdown or getting stuck are high due to the remoteness of the area and will be borne by the operator of the vehicle.

Table 5 Allocations for Roads with Restricted Day Use

AREA	PRIVATE VEHICLES PER DAY	BICYCLES PER DAY	PACK AND SADDLE STOCK PER DAY	COMMERCIAL VEHICLE USE PER DAY
Salt & Horse Canyon zone	10 vehicles	7 bicycles (private or commercial)	7animals	2 vehicles
Lavender Canyon	8 vehicles .	7 bicycles (private or commercial)	7animals	2 vehicles

Road maintenance. Defined levels of road maintenance will be addressed in a written maintenance plan. The goal of road and trail maintenance is to perform the minimal maintenance **necessary** to keep the roads and trails safe and passable, and to minimize resource damage caused by multiple trailing due to impassable or unrecognizable trails.

3. Signs

Signs may be used to give directions and distances to major features, provide information, educate visitors, mark campsites and toilet facilities, and delineate closures or restrictions for resource and visitor protection. Directional signs are maintained at strategic points such as trail junctions to facilitate travel on backcountry trails. Trailhead signs or bulletin boards will be installed as needed for resource and visitor protection. Register boxes and/or interpretive signs may be placed in the backcountry to help protect sensitive resources such as relict areas and cultural sites.

4. Picnic tables

Picnic tables are provided at the Lathrop Canyon day use area in the Island in the Sky District and at all vehicle campsites in the Needles District.

5. Toilets and human waste

Toilets are provided along backcountry roads at heavily used day use locations as well as at designated campsites in the Island in the Sky and Needles districts.

Toilets are not provided in the Maze and Orange Cliffs because of the difficulty of pumper-truck access and of servicing dehydrating, composting, or other toilet systems in remote locations. Campers at vehicle campsites in the Maze and Orange Cliffs will be required to carry out solid human waste in a portable toilet system. Toilet systems are available through boating and RV supply stores and companies in gateway towns are renting new portable toilets to users who may not want to purchase their own.

Where toilets are not provided and carry out is not required, solid human waste will continue to be buried in "catholes. " A **cathole** should be a small hole excavated 6 to 8 inches deep and at least **300** feet from water sources (including seeps; potholes, springs, streams, and the Green and Colorado Rivers), potential water sources (arroyos or dry washes), archeological or historical sites, alcoves or rock shelters, and campsites. Used toilet paper, feminine hygiene products, diapers, or any other paper product must be carried out of the park in a sanitary manner, such as bagged in self-sealing plastic bags. Burning toilet paper is prohibited.

In frequently used backcountry campsites, human waste is not only an aesthetic issue, but can result in unacceptable resource impacts and public health problems. If this plan does not adequately resolve the human waste problems in the backcountry with smaller group sizes and limited numbers of permits, other solutions or further restrictions may be required. Maintained backcountry toilets in the Needles and Island in the Sky districts may be phased out in the future and portable toilets may be required to be carried. When a fail-proof backpacker version of a human waste container is developed, these too may be required for backpack use.

6. Hiking trails

All designated hiking trails will remain open. The segments of roads that have been closed will become hiking trails. Defined levels of trail maintenance will be addressed in a written maintenance plan.

7. Trash and garbage cans

Backcountry users must pack out all trash and garbage (including toilet paper as discussed above). Garbage cans are not provided. Trash and garbage may not be deposited in backcountry toilets. Trash deposited in vault toilets prevents them from being pumped.

L. NOISE

Camp activities may not be heard outside of the campsite. At no time should audio devices be audible outside of a vehicle or campsite. Quiet hours are from 10 P.M. to 6 A.M. local time. Operation of generators in the backcountry is not permitted. An exception may be made for generators needed for medical purposes if prior approval of the District Ranger is obtained. Additional National Park Service noise regulations are listed in 36 CFR 2.12.

Utah traffic codes prohibit excessive or unusual motor vehicle noise. Every motor vehicle is required to have a muffler or other effective noise-suppressing system in good working order and in constant operation.

M. OFF-SEASON USE

Currently, backcountry overnight visitation is seasonally variable, with the highest use in spring and fall. With implementation of this plan, and with projected increases in visitation, limits on user nights will likely be reached in spring and fall. Currently, off-season use (January, February, July, August, and December) is approximately 21 percent of total backcountry use. If user nights in the off-season rise to more than 25 percent of the total backcountry use, this plan may be altered to retain an off-season period by limiting use in those months.

Most use in the winter is comprised of the same activities that take place other times of the year. Rules for these activities, such as driving a motor vehicle, apply in all seasons. Activities unique to winter follow the same general guidelines as other uses. Cross-country skiing is allowed both on and off-trail; however, the use of hiking trails, roads, or wash bottoms is encouraged to prevent resource damage and for visitor safety.

N. PETS

- All pets are prohibited in the backcountry of Canyonlands N.P.
- Pets must be on a leash in the Orange Cliffs Unit of Glen Canyon N.R.A.
- Pet waste is subject to the same restrictions and removal/treatment as human waste in the N.R. A.
- Pets may not be left unattended, tied, or physically confined in the front country to facilitate backcountry travel.
- Guide or assistance dogs accompanying a visually or hearing impaired person are not considered pets and are not prohibited.

0. PACK AND SADDLE STOCK USE

-Horses, mules and burros are the only animals considered pack and saddle stock. Llamas and goats are prohibited by Superintendent's Directive due to the possibility of disease transmission to native animals, especially desert bighorn sheep. If evidence appears in the future showing disease(s) transmitted from other pack and saddle stock is a threat to native wildlife, these regulations may be revised. This may result in restricting pack and saddle stock from certain areas or eliminating all use from the park.

-All pack and saddle stock users must obtain a backcountry use permit, either for day use or camping. Day use permits are unlimited and free of charge, except in Salt Creek, Horse Canyon and Lavender Canyon in the Needles District. In these areas of limited day use, and for all overnight stays in the backcountry, permits are available through the reservation system, and there is a fee associated (see Appendix C for reservation information).

-Group sizes are limited to 10 people and 10 animals for day use, except in the following areas. In Salt Creek, Horse Canyon, and Lavender Canyon, day use is limited to seven (7) animals per day. (See Table 5.)

-Group size for overnight use is seven (7) people and ten (10) animals in the Needles and Island in the Sky Districts, and five (5) people and eight (8) horses in the Maze and Orange Cliffs areas.

. -Day use of pack and saddle stock is allowed on all backcountry roads.

-Overnight use by pack and saddle stock is allowed at all backcountry vehicle campsites. If sanitation or safety problems develop, this policy may be modified.

-At-large camping with stock is not permitted.

-Cross country travel is not permitted, except in a portion of the Orange Cliffs as described below.

-All pack and saddle animals are required to be fed pelletized feed for 48 hours in advance, of and for the duration of the trip to prevent the spread of exotic plant species. Park vegetation may not be consumed.

-All manure and feed must be removed from the campsite and packed out.

-Pack and stock animals may not be left unattended. They must be staked away from water sources (at least 300 feet) and away from vegetation where possible, and may not be **unstaked** and hobbled.

-Commercial use of saddle and pack stock is no longer allowed (see Appendix D).

1. Pack and saddle stock in Horseshoe Canyon

The west side hiking trail in Horseshoe Canyon is open to pack and saddle stock day use. A backcountry use permit is required. Ten (10) horses per party is the maximum group size. Saddle and pack stock must remain in the wash and are limited to the area from the bottom of the road and foot

trail, to one-half mile south of the Great Gallery. Upstream from there, where the wash bottom is impassable in places, stock users will be permitted to travel on the foot trail. To reduce the potential for damage from dust and silica particles, pack and saddle stock may not approach the rock art. Hitching posts will be provided at locations that allow visitors access to viewing the rock art. If saddle and pack stock use increases to the point of threatening the rock art or creating safety problems, this activity will be curtailed in the canyon.

2. Pack and saddle stock in the Orange Cliffs

An exception to the policy for pack and saddle stock will be the Orange Cliffs mesa top area above 6,000 feet, where grazing allotments are active. In this area, cross country travel and at-large overnight camping with saddle and pack stock will be allowed. The weed-free feed policy will be in effect. A backcountry use permit will be required for day and overnight use. Day use permits are unlimited in number and free of charge. Overnight pack and saddle stock users need an at-large backpacking permit which is available through the reservation system (see Appendix C). Group size will be limited to five (5) people with eight (8) animals for overnight use. (Five people corresponds to the overnight group size for backpack camping). All camping regulations for at-large backpack camping will apply. In addition, during travel or where animals are tethered, manure must be scattered, keeping it at least 300 feet from water sources.

3. Grazing permittees in the Orange Cliffs

The regulation of ranching operations by current grazing permittees does not fall under the scope of this plan. Grazing permittees are exempt from certain regulations that may hinder their operations: dogs may be in the backcountry and off leash to work cattle, numbers of horses and riders involved in managing livestock are not limited, and camping may occur within Glen Canyon National Recreation Area in locations and group sizes necessary for grazing operations. Only holders of current grazing permits are included in these exceptions. All stipulations of the grazing permits apply.

P. TECHNICAL ROCK CLIMBING AND CANYONEERING

Technical rock climbing is defined as ascending or descending a rock formation utilizing rock climbing equipment.

Canyoneering is defined as cross country travel involving occasional ascending or descending a rock formation utilizing rock climbing equipment.

Permits are not required for rock climbing or canyoneering; however, if the climbing or canyoneering is overnight, then a backcountry use permit is required and the climbers or **canyoneers** are subject to all provisions for minimum impact camping. The number of available overnight permits will be subject to the total available for the backcountry zone where the overnight stay occurs.

-Climbing and **canyoneering** within Canyonlands National Park and the Orange Cliffs Unit shall be either

free climbing or clean aid climbing, except as described below.

- No new climbing hardware may be left in a fixed location; however, if an existing bolt or other hardware item is unsafe, it may be replaced. This will limit all climbing to existing routes or new routes not requiring placement of fixed anchors.

- Protection may not be placed with the use of a hammer except to replace existing belay and rappel anchors and bolts on existing routes, or for emergency self-rescue.

- If an existing software item (sling, runner etc.) is unsafe, it may be replaced.

- Software that is left in place shall match the rock surface in color.

- The intentional removal of lichen or plants from rock is prohibited.

- The physical altering of rock faces such as by chiseling, glue reinforcement of existing holds, and gluing of new holds is prohibited.

- The use of motorized power drills is prohibited.

- Technical rock climbing is prohibited in the following areas:

 - the Salt Creek Archeological District of the Needles District

 - the detached Horseshoe Canyon Unit of the Maze District

 - on any arch or natural bridge named on the United States Geological Survey 1:62,500 topographic map of Canyonlands National Park and Vicinity, with the exception of Washer Woman Arch

- Rock climbing, ascending, descending, or traversing an archeological site or cultural resource is prohibited. Canyoneering may occur in locations closed to rock climbing, but must occur at least 300 feet away from archeological or cultural sites.

These requirements are established to minimize alteration of the rock formations and rock art of Canyonlands and Orange Cliffs. Free climbing and clean aid climbing are minimum-impact approaches which employ stoppers, nuts and friends, rather than pitons or bolts, for protection or direct support. These are climbing aids which are removable and do not damage the rock.

Q. VEHICLES

- All motorized vehicles (including motorcycles) must abide by Utah State licensing requirements for highway travel and NPS rules and regulations.

- All-terrain vehicles (ATVs) are not permitted in Canyonlands National Park.

- Numbers of vehicle travelers and bicyclists, and the sizes of these groups, will not be restricted at this time, except as listed in restrictions elsewhere in this document.

- Vehicle travelers and bicyclists are required to stay on designated roads at all times.
- Travel is not allowed on roads posted as closed or roads with barriers of logs or rocks at the entrance.
- Travel is not allowed on hiking trails or foot trails.
- When yielding to oncoming traffic or parking, vehicles may be pulled off of the roadway just far enough to allow another vehicle to pass. Drivers should choose a location which damages vegetation and soil crusts to the least degree possible. Use of existing pull-outs and parking areas is encouraged.
- All areas of the backcountry outside the road corridors are proposed wilderness. In keeping with wilderness mandates, and to be consistent with wilderness management policies of the NPS, possession of bicycles or mountain bikes (mechanized means of travel) off roads, on hiking trails, or out of developed campsites is prohibited. See also sections on Camping and Roads, above.

R. WATER USE

Water-sources are scarce in this desert environment, yet vital to all forms of life. The following regulations for human use of water help to protect the water sources for all:

- All campsites, unless designated by the NPS, must be at least 300 feet away from water sources (including seeps, potholes, springs, and streams; the Green and Colorado Rivers are exceptions).
- Saddle and pack stock must be staked at least 300 feet from water sources where possible.
- Only biodegradable soaps may be used, and they must be used at least 100 feet away from water sources, with the exception of the Green and Colorado rivers.
- Swimming, bathing, and immersing human bodies in water sources is prohibited (except in the Green and Colorado Rivers and the section of Salt Creek that is open to vehicle use).
- Rinsing dishes or other equipment directly in water sources is prohibited, except in the Green and Colorado Rivers.
- A water source may not be emptied or depleted for human use.

III. MANAGEMENT ACTIVITIES

A. CULTURAL RESOURCE PROTECTION

1. Site disclosure

Many of the archeological (including historical) sites within Canyonlands and the Orange Cliffs Unit have a long history of visitor use. In fact, the park was established partly to ensure public access to sites. However, both the National Historic Preservation Act (Public Law 89-665, 1966) and the Archeological Resources Protection Act (Public Law 96-65, 1979) mandate that the NPS only disclose site locations if no harm, theft or destruction will result from disclosure. To comply with these laws, park staff may provide locational information only to sites which are regularly patrolled, monitored, stabilized, or otherwise protected from visitor impacts or harm. (Canyonlands Superintendent's Directive 1993 H-1 contains the details of the Cultural Site Information Disclosure Policy.) Visitors are welcome to explore the backcountry and locate archaeological and cultural sites; however, archaeological sites may not be entered.

2. Entering archaeological and cultural sites

The Code of Federal Regulations (36 CFR 2.1 (a)(5)) states that archaeological and cultural sites may not be entered by visitors. This means visitors may not go inside structures or human-made enclosures, whether prehistoric, protohistoric, or historic. Visitors may approach outside walls on structural sites, but they may not go inside structural walls or enclosures. These sites are often fragile, and much of their educational and scientific value can be lost if they are damaged.

The boundaries of an archaeological site include ephemeral surface features, such as middens or garbage dumps, surface scatters of broken ceramics or stone tools, and extramural hearths or fire rings. The law prohibits entering, altering, or damaging these surface features, as well as structures. Middens and surface artifact scatters almost always surround the rock art and structural features. However, since virtually every archaeological or historical site of interest to visitors has a trail to and through it, visitors may legally cross middens, overhangs, surface scatters, etc. to see features of interest as long as they go single file and stay on existing trails. Walking off existing trails through archaeological or historical sites is prohibited under the Code of Federal Regulations and the Archaeological Resources Protection Act.

B. EMERGENCY SERVICES

In the event of life-threatening emergencies or if park resources are being significantly impaired, the NPS may conduct emergency operations (such as search and rescue) which violate rules set forth in this plan.

C. WILDERNESS AND SOLITUDE

By zoning Canyonlands and Orange Cliffs backcountry and redistributing use into zones most capable of withstanding visitor impacts, visitors are ensured opportunities for solitude. Under all alternatives, Canyonlands National Park's backcountry and Glen Canyon National Recreation Area's "natural" zoned lands will continue to be managed as wilderness until Congress acts on proposed wilderness areas.

D. UPDATING THE PLAN

The duration of this plan is expected to be at least five years. However, the plan and its impacts to the park will be reviewed and updated as necessary by the Resource Management Division of Canyonlands National Park, with input from Glen Canyon National Recreation Area.

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V. LIST OF PREPARERS

Preparers

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Nancy Coulam, Archeologist

Planning Team

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Brian Coulter, Maintenance and Operations Foreman, Needles District

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Joseph Alston, Superintendent
Larry May, Assistant Superintendent
John Ritenour, Chief of Resource Management
Victor Knox, Chief of Professional Services
Ken McMullen, Environmental Specialist
Kerry Haut, Hite Subdistrict Ranger

Agencies Consulted

U.S. Forest Service, Monticello District

Bureau of Land Management
Grand Resource Area
San Juan Resource Area
Henry Mountain Resource Area

National Park Service
Glen Canyon National Recreation Area
Grand Canyon National Park
Navajo National Monument
Canyon de Chelly National Monument
Wupatki National Monument

National Biological Survey

U.S. Fish and Wildlife Service

Utah State Historic Preservation Office

Utah Division of Indian Affairs

Indian Tribes

Acoma Pueblo
Cochiti Pueblo
Isleta Pueblo
Jemez Pueblo
Laguna Pueblo
Nambe Pueblo
Picuris Pueblo
Pojoque Pueblo
Sandia Pueblo
San Felipe Pueblo
San Ildefonso Pueblo
San Juan Pueblo
Santa **Ana** Pueblo
Santa Clara Pueblo
Santo Domingo Pueblo
Taos Pueblo
Tesuque Pueblo
Zia Pueblo
Zuni Pueblo
Hopi Tribe
All Indian Pueblo Council

Eight Northern Indian Pueblo Council
Southern Pueblo Council
Kaibab Paiute
San Juan Southern Pueblo
Paiute Tribe of Utah
Uintah and Ouray Utes
White Mesa Ute
Southern Ute
Ute Mountain Ute
Navajo Nation

APPENDIX A: FINDING OF NO SIGNIFICANT IMPACT

Final 1994 Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan

Canyonlands National Park

November 30, 1994

In accordance with the provisions of the National Environmental Policy Act of 1969 (NEPA) and the regulations of the Council on Environmental Quality (40 CFR 1508.9), the National Park Service prepared an environmental assessment (EA) for the Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan. The EA analyzed and evaluated the impacts of multiple alternatives for management of visitor use of the backcountry of Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area. This EA was released for public comment in December, 1993.

THE PROPOSAL

The proposal is a series of management actions which will allow the NPS to balance its mandates of allowing public access and enjoyment of the backcountry while providing long-term preservation and protection of resources. In the proposal, backcountry use will be distributed by zones. A reservation system will be implemented to facilitate visitor use of the zones. Substantive changes in management include limits on the number of overnight groups per zone; designated backpack campsites in some zones; group size limits, new regulations for climbing, and pack and saddle stock use; and closure of some segments of roads to protect resources. The proposal also resolves lesser issues such as signs, education, pets, etc.

The proposal is based on preferred alternatives described in the draft plan and EA, other alternatives in the draft plan and EA, or alternatives modified based on public comments. A summary of the some of the more controversial issues in the proposal follows.

The zoning scheme proposed is a simplified version of the preferred alternative based on comments that the original zoning scheme was too complicated. Impacts related to this change are expected to be restricted to areas already impacted by current visitor activities. In two of the three districts, group size for backpack campers was increased by one person, and number of vehicles per campsite was increased by one over the proposal. Two additional campsites in the Orange Cliffs will be designated to facilitate travel. In Horseshoe Canyon, a combination of alternatives was chosen, providing for walkways and barriers, guided hikes, and group size limits for access without a guide.

The management solution selected to allow vehicular access to Angel Arch while reducing adverse impacts on riparian resources of Salt Creek and Horse Canyon roads is a combination of alternatives

presented and suggestions made by the public. Salt Creek and Horse Canyon will remain open to a limited and regulated amount of vehicular traffic. A maximum of 20 vehicles per day will be permitted in this zone, a reduction from the peak use of 60 to 70 vehicles per day which now occurs during the spring. This will reduce the impacts to the riparian ecosystem.

The management solutions for Davis and Lavender canyons combine public suggestions and EA alternatives. Many public comments called for the closure of these areas to protect archeological, social and riparian resources, as did Alternative A presented in the EA. Lavender Canyon will remain open to limited amounts of vehicle traffic. Davis Canyon will be closed to vehicle access. The adoption of these policies will reduce the impacts to cultural and natural resources in both canyons. In Davis Canyon, the newly converted foot trail will provide the only designated hiking trail in the larger drainages on the eastern side of the Needles District where hikers can enjoy a canyon without vehicle traffic.

Overnight pack and saddle stock use will be permitted in designated vehicle campsites. This proposal is a combination of the no action and preferred alternative and takes into account comments from horse users that they wished to use the backcountry overnight.

Commercial use will be allowed as described in the preferred alternative, with a few additional permit allotments and the retaining of Commercial Use Licenses for commercial backpacking.

Rock climbing will be managed as in the preferred alternative with the addition of allowing climbing on existing routes in all parts of the planning area. A definition of canyoneering added, as suggested by public comment.

ALTERNATIVES CONSIDERED

Thirty-eight issues were addressed in the EA. Each issue had at least a no action alternative, and many issues had multiple possible alternatives. Some of the more complex issues included vehicular access to Salt Creek, Horse, Davis, and Lavender canyons, group size, protection strategies for rock art in Horseshoe Canyon, commercial activities, and rock climbing.

PUBLIC INVOLVEMENT AND CONSULTATION

Public involvement in the planning process began in May of 1992 when park visitors and the general public were asked what issues should be addressed in the plan and EA through questionnaires, comment sheets distributed in the park, publication of a "notice of intent" to prepare the plan and EA in the Federal Register, and through press releases. About 40 issues were raised in 158 responses received by October 1992. An additional comment period was held to solicit ideas on addressing issues identified in scoping. Six public meetings were held and 111 written comments were received.

Beginning in December, 1993 nearly 2,000 copies of the draft plan were distributed for public review. The public commented on the plan through letters, questionnaires, and public meetings. The comment period closed March 5, 1994 with 2,235 written comments containing 3,235 signatures received. Based on these comments, many of the preferred alternatives in the draft plan were modified in the final

solutions in the proposal.

Consultation was conducted and comments received from interested Indian tribes, various Federal agencies including the Bureau of Land Management, Forest Service, Fish and Wildlife Service, and State and local agencies such as the Utah State Historic Preservation Office, and San Juan County, Utah.

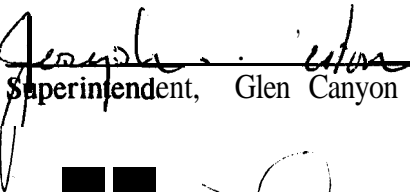
CONCLUSION

The Final Backcountry Management Plan for Canyonlands and the Orange Cliffs Unit does not constitute an action that normally requires the preparation of an environmental impact statement. The plan will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, sites or districts listed on or eligible for listing on the National Register of Historic **Places**, or other unique characteristics of the region. The actions proposed in this plan will not affect any Federally listed threatened or endangered species. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. The activities covered in this plan are not subject to Executive Order 11990, therefore a Statement of Findings will not be prepared. Implementation of the action will not violate any federal, state or local laws.

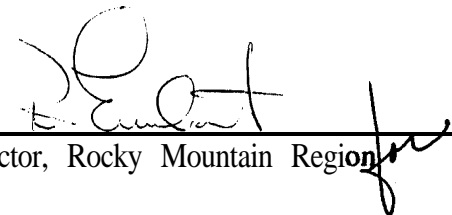
Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and thus will not be prepared.

Recommended:


Superintendent, Southeast Utah Group
Date: 1/10/95


Superintendent, Glen Canyon National Recreation Area
Date: 1-13-95

Approved:


Regional Director, Rocky Mountain Region
Date: 1 25 95

APPENDIX B. THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS FOR THE PLAN

SCOPING

The planning process began in June of 1992 with the formation of a multi-disciplinary planning team. The team reviewed the legislation relating to backcountry management, as well as problems and issues affecting the backcountry. The public became involved in the planning process in May of 1992 with the beginning of a scoping period. Press releases announcing the scoping period for the plan and environmental assessment were submitted to regional newspapers, television, and radio stations. In addition, on June 18, 1992, a “notice of intent” to prepare the backcountry management plan and environmental assessment was published in the Federal Register. Questionnaires distributed at Park visitor centers throughout the planning area and in response to telephone calls and mail requests resulted in the identification of 38 issues to be addressed from the 158 responses that were received by October of 1992.

DEVELOPMENT OF ALTERNATIVES

The next planning phase began in November of 1992 when a newsletter was mailed to about 600 individuals and organizations who had expressed interest in the planning process. The newsletter sought additional public input on issues identified during scoping. Some 111 responses to the newsletter were received by February of 1993. During December of 1992 and January of 1993, some 51 people attended six public meetings held throughout the region to discuss issues in the newsletter.

Based on public and staff input, the planning team developed a series of alternatives to address backcountry issues. These alternatives were described in the Draft Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Environmental Assessment for Backcountry Management (December 1993). Nearly 2,000 copies of the draft Environmental Assessment (EA) were distributed for review and comment to people or organizations who had participated in previous comment periods or who had asked to be on the mailing list. News releases were sent to Utah and Colorado newspapers, television stations and radio stations announcing the availability of the draft environmental assessment. Local newspapers and radio stations received news releases announcing public meetings to discuss the plan. Public meetings were held in January 1994 in Green River, Hanksville, Monticello, Moab, and Salt Lake City, Utah and in Denver, Colorado with a total of 471 people attending. The public was initially asked to respond to the environmental assessment during the period from December 18, 1993 to February 18, 1994, but due to public interest, the comment period was officially extended to March 5, 1994. All comments from speakers at the public meetings and all written comments postmarked by March 31, 1994 were considered by the planning team.

COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT

The planning team received 2,235 written comments containing signatures from 3,235 individuals, and 471 people attended public meetings on the draft plan and environmental assessment. Some people commented on the few issues of interest to them; others commented on all issues. Many responded to letter writing campaigns initiated by special interest groups, such as horse or pack stock organizations, four-wheel-drive clubs, rock climbing organizations, and environmental organizations. The number of responses received by each type of commentor is shown in Table B. 1 below.

Each comment was read, coded, and input in database. Information on the type of comment received (letter, chart, letter writing campaign, etc.) and the commentator (individual, commercial company, federal agency, etc .) was entered as well as verbatim comments pertaining to specific issues. The comments were then sorted by issue, and all the verbatim remarks were printed out for the planning team to read. The team carefully considered all the public comments, and examined all management solutions submitted by the public but missed by the draft environmental assessment.

Commentors also differed in their place of origin. Utah residents accounted for 31 percent of the comments, and Colorado residents accounted for 21 percent. Another 48 percent of the comments came from residents of other states, with less than 1 percent coming from other countries.

Table B. 1. Numbers and Types of Commentors

<u>Type of Commentor</u>	<u># of Signatures</u>
Individuals	681
Agencies (federal, state, county, city)	10
Elected Federal Officials	2
Universities, Schools	5
Tribal Governments	2
4-Wheel-Drive Organizations*	23
4-Wheel-Drive Interests?	640
Environmental Organizations*	9
Environmental Interests†	652
Saddle & Pack Organizations*	28
Saddle & Pack Interests?	781
Rock Climbing Organizations*	5
Rock Climbing Interests?	269
Commercial Organizations*	21
Commercial Interests†	93
<u>Other Organizations*</u>	<u>14</u>
TOTAL	3235

*Organization is an officer of an organization acting on its behalf.

†**Interest** is a member of the organization or group.

Comments differed in form and content, as shown in Table B.2. Con-mentors spoke at public meetings, used the response chart included in the EA, or wrote letters. Comments ranged from a 30 second **single-**issue comment at a public meeting, to several booklets nearly as long as the EA itself, to a complete manuscript inspired by the backcountry. The planning team created a computerized data base to facilitate a systematic and objective review of each issue and each solution from each public comment that enabled them to find the best ways to meet the backcountry management mandates and objectives.

Table B .2. Type of Response

<u>Type of Resonse</u>	<u># of Signatures</u>
Letter	468
Response Chart	199
Letter & Chart	115
Form Letter	498
Public Hearing Transcript	76
Petition	464
<u>Writing Campaign</u>	<u>1415</u>
TOTAL	3235

FINAL DECISION MAKING

The length of time the planning team spent to read, code, input, and analyze the public comments assured consideration of all responses. The role of the public in NEPA is particularly important during scoping, when the public helps decide which issues should be addressed in the environmental assessment. In this planning process, additional public input was solicited to suggest ways to address the issues identified in scoping. The public also participated in the process by attending public meetings and submitting comments to the agency, and by suggesting viable management alternatives that the planning team had not considered. This **final** plan reflects several changes due to public comment. However, the number of comments supporting or opposing the various proposed management alternatives was not the sole factor in selecting management alternatives.

After consideration of all public comments, the planning team made recommendations to the park Superintendents. After reviewing planning team recommendations and analyzing the public comments, the Superintendents selected a final management alternative for each issue based on the enabling legislation for the planning area, the NPS Organic Act, other laws and policies affecting the planning area including the NEPA, the National Historic Preservation Act of 1966 as amended, the Endangered Species Act of 1973 as amended, the Wilderness Act of 1964, etc., and consistency with other plans, such as the General Management Plan of 1978.

This plan and the attached Finding of No Significant Impact (FONSI) represent the **culmination** of the two-year NEPA process and planning effort. The plan is expected to guide management of the backcountry for at least five years.

APPENDIX C. BACKCOUNTRY PERMIT RESERVATION SYSTEM

TO RESERVE A BACKCOUNTRY USE PERMIT

Backcountry use permits will be available by advanced reservations beginning sometime in late January 1995. Reservations will be strongly recommended so visitors will be assured of a permit and campsite availability. Reservation requests will be made by mail, in person or over the telephone. Reservation requests may be mailed to the Central Reservation Office, Canyonlands National Park, 2282 S. West Resource Blvd., Moab, UT 84532. Telephone requests will be accepted during office hours (to be designated) at 801-259-4351. Telephone requesters must provide a Visa or Mastercard number to pay the required processing fee. The NPS will return a written request confirmation.

TO OBTAIN A BACKCOUNTRY PERMIT

Backcountry users must pick up their backcountry use permit from the visitor center in the district where the trip begins. The reservation confirmation holds the campsites and zone allocation, it is not a backcountry permit. The backcountry use permit is valid only for the specified itinerary and dates on the backcountry permit. If a permit is not claimed by the time specified on the written confirmation, the entire trip is automatically canceled. It is possible to pick up your permit one day before the trip is scheduled to begin. No backcountry use permits will be issued less than one hour before the close of the visitor center.

Unused or non-reserved backcountry use allocations or use reservations not picked up one hour prior to the close of the visitor center on the first day of the reserved trip will be available to visitors walking into the visitor centers on a first-come, first-served basis.

FEES

Non-refundable fees will be charged to offset costs of the reservation system. Fees associated with permit reservations will remain in Canyonlands National Park to fund the reservation system and support backcountry management. These fees are not waived for any group, including educational groups. In addition to backcountry use reservation fees, visitors will be required to pay park entrance fees where applicable. Fees will be charged for the following uses:

- Backpacking permits
- Backcountry vehicle campsites
- Day use permits (for Salt Creek and Horse and Lavender Canyons, where day use is limited)
- Cataract Canyon river trips (multi-day)
- Cataract Canyon river trips (one day)
- Flatwater river trips

APPENDIX D. COMMERCIAL USE

A commercial trip or operation is defined as a trip where actual costs are not shared equally by all participants, profit is a goal of the trip, or, there is public advertising for participants. Commercial use is regulated by the mode of transportation used in the backcountry. Definitions, regulations and the specifics for managing commercial use are outlined in the Commercial Visitor Services Management Plan for Arches National Park, Canyonlands National Park and Natural Bridges National Monument. Commercial river trips are addressed in the Canyonlands river management plan. All commercial operations must have authorization from the Superintendent or Concession Specialist prior to offering any services in the park or recreation area. It is important to note that clients of park concessionaires are also “park visitors” who accomplish their visit with the help of the outfitter.

Activities by groups that do not fall under commercial guidelines (educational groups where academic credit is available and the Boy Scouts, for example) may visit the park or recreation area under the regulations for noncommercial visitors. Special organized events must apply to the Chief Ranger for a permit.

All commercial backcountry operations and operators must comply with all provisions, rules and regulations of this Plan. Backcountry commercial operators may reserve permits on the same basis as the public. Commercial operators can be allocated additional backcountry permits on the day of their trip if walk-in backcountry permits are available. Numbers of permits that may be reserved by commercial operators are defined below.

COMMERCIAL VEHICLE AND BICYCLE OPERATIONS

Currently three companies may offer commercial vehicle services under concession permits. Two companies may provide overnight vehicle tours, as well as day trips; the third company may provide day trips only.

Five bicycle tour operators may offer overnight bicycle tours and services. These operators are regulated through concession permits. Commercial bicycle day use has been unregulated. Upon expiration of the current licenses in 1996, commercial bicycle day use in the front country will also be regulated through concession permits. Allocation of permits to vehicle and tour operators is shown in Table D. 1

In addition to limited permit allocation, location of permits in the Island in the Sky District is regulated. No more than one campsite may be reserved in advance by any commercial company for any given night. No more than two commercial companies will be allowed to make an advanced reservation for a campground location containing three campsites, or to reserve more than one site at a two-site camp area.

In the Needles District, only one of the two Peekaboo campsites may be occupied by a commercial operator on any one night. In the Maze District, only one campsite at the Maze Overlook and one at the Doll House may be occupied by commercial operators on any given night.

Table D. 1. Total Number of Backcountry Permits Allocated to Commercial Vehicle and Bicycle Operations Per Day or Night

DISTRICT or Area	# PERMITS FOR VEHICLE CAMPING	# PERMITS FOR DAY USE VEHICLE	# PERMITS FOR DAY USE BICYCLE
ISLAND IN THE SKY	5	--	--
NEEDLES	2	--	--
Salt & Horse	--	2	7
Lavender Canyon	--	2	7
MAZE, ORANGE CLIFFS	3"	--	--

*Of the three (3) permits allocated for commercial vehicle use in the Maze and Orange Cliffs, no more than two (2) sites may be occupied in the Maze District on any one night.

COMMERCIAL BACKPACKING

Commercial backpacking will continue to be regulated by Commercial Use Licenses (CULs). The backpacking CULs will be limited by the number of backcountry permits allocated for commercial backpacking. The CULs will also be limited to commercial organizations that can meet the group size limits of seven (7) backpackers in the Needles and Island in the Sky districts, and five (5) backpackers in the Maze and Orange Cliffs. Continued operation under CULs will allow a variety of commercial backpacking trips to be offered.

Advance reservation for permits for commercial backpack camping will be limited as shown in Table D.2.

Table D.2 Total Number of Overnight Permits Allowed for Commercial Backpack Concessionaires Per Night Per District

DISTRICT	NUMBER OF PERMITS
Island in the Sky	1
Needles	4
Maze and Orange Cliffs	2

COMMERCIAL FILMING

Commercial filming will continue to be administered through established NPS guidelines (NPS-21). Each request for filming will be evaluated based on the specifics of the proposed project. All restrictions imposed by this Plan will apply to all commercial **filming** activities in the backcountry. No area or activity will be permitted for commercial **filming** that is not available to the general public on an equal basis.

Commercial filming involving aircraft and overflights in Canyonlands must follow all the rules for both activities. Aircraft shall maintain an altitude of 2,000 feet above surface level with the term “surface” defined as the highest terrain within 2,000 feet laterally and vertically of the flight route at all times. Flight routes will be approved in advance. Aerial acrobatics are prohibited. Aircraft may not take off or land within the park.

All potential filming activities within the boundaries of Glen Canyon and Canyonlands are subject to well-established permit procedures that include pre-approval of all filming locations and activities, recognition of Federal Administration Administration regulations regarding management of airspace and waivers thereof, close monitoring of all **filming** activities, insurance requirements, security bonds, and the authority of the NPS to recover all costs associated with the issuance and monitoring of **filming** permits.

COMMERCIAL PACK AND SADDLE STOCK USE

No commercial pack and saddle stock use will be allowed after December 1994. There has been only one commercial horse trip in the last four years, and this service appears to be unneeded. If at some time in the future this service becomes necessary, commercial horse and pack stock service may be resumed.

COMMERCIAL ROCK CLIMBING

No commercial rock climbing will be allowed. In 1994, no Commercial Use Licenses for rock climbing were issued, and no complaints or requests from people wanting a rock climbing guide were received by the NPS.

Commercial canyoneering is regulated under the commercial backpacking and hiking regulations.

APPENDIX E. DESIGNATED BACKCOUNTRY VEHICLE AND BACKPACK CAMPSITES

Table E. 1. Designated Vehicle Campsites, Limits and Facilities (note: fire grates are not provided)

DISTRICT Zone	CAMPING AREA	# SITES	# PEOPLE/ # VEHICLES PER SITE	FACILITIES
ISLAND IN THE SKY		20 total		
White Rim	Shafer	1	15 / 3	1 toilet
	Airport	4	15 / 3	2 toilets
	Gooseberry	2	15 / 3	1 toilet
	White Crack	1	15 / 3	1 toilet
	Murphy	3	15 / 3	2 toilets
	Candlestick	1	15 / 3	1 toilet
	Potato Bottom	3	15 / 3	2 toilets
	Hardscrabble	2	15 / 3	2 toilets
	Labyrinth	2	15 / 3	1 toilet
Taylor Canyon	Taylor	1	15 / 3	1 toilet
NEEDLES DISTRICT		12 total		
Salt & Horse	Peekaboo	2	10 / 3	1 toilet 2 tables
Red Lake & Grabens	Devils Kitchen	4	10 / 3	2 toilets 4 tables
	Bobby Jo	2	10 / 3	1 toilet 2 tables
	Horsehoof	1	10 / 3	1 toilet 1 table
	New Bates Wilson ("Picnic Site")	2	10 / 3	* 2 tables
	Cyclone	1	10 / 3	* 1 table

DISTRICT Zone	CAMPING AREA	# SITES	# PEOPLE/ # VEHICLES PER SITE	FACILITIES
MAZE & ORANGE CLIFFS		20 total		
Maze Area	Doll House	3	9 / 3	none
	Chimney Rock	1	9 / 3	none
	The Wall	1	9 / 3	none
	Standing Rock	1	9 / 3	none
	Maze Overlook	2	9 / 3	none
	Golden Stairs**	1	9 / 3	none
	Teapot Canyon**	1	9 / 3	none
	Sunset Pass* *	1	9 / 3	none
Orange Cliffs	Flint Seep* *	1	16 / 5	none
	The Neck**	1	9 / 3	none
	Happy Canyon**	1	9 / 3	none
High Spur	North Point**	1	9 / 3	none
	Panorama Point**	1	9 / 3	none
	Cleopatra's Chair* *	1	9 / 3	none
	High Spur**	1	9 / 3	none
	Millard Canyon	1	9 / 3	none
	Ekker Butte* *	1	9 / 3	none

Portable toilets required.

** Campsite in the Orange Cliffs Unit of Glen Canyon. All others are in Canyonlands National Park.

Table E.2. Zones With Designated Backpacking Campsites (no facilities are provided)

DISTRICT	ZONE	# CAMPSITES	GROUP SIZE
Island in the Sky	Syncline	1	7 people
Needles	Upper Salt	4	7 people
Needles	Needles Trails	16	7 people

APPENDIX F. RESPONSE TO SUBSTANTIVE COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL ASSESSMENT

The following are agency responses to substantive comments on the draft environmental assessment (EA). Similar comments have been consolidated.

PLANNING AND NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS

Comment: The NEPA process was not followed in this environmental assessment.

NPS Response: The “NEPA process” is defined in 40 CFR 1500-1508 as all measures necessary for compliance with the requirements of section 2 and Title I of the National Environmental Policy Act. These sections and titles require Federal agencies to evaluate the environmental effects of a federal undertaking, including its alternatives. The planning team determined the appropriate level of analysis for the backcountry management plan to be preparation of an environmental assessment (EA). Additional steps in the planning and NEPA process are described in Appendix B.

Comment: There was not adequate public comment in the preparing of this Plan. Other agencies whose lands may be affected were not consulted.

NPS Response: The public played an important role in the planning process, not just in providing input on issues to be addressed in the EA, but in finding management solutions to backcountry problems. A full explanation of the public role in the planning process is found in Appendix B.

Other agencies were fully involved in the planning process. Other agencies were included in as many of the planning steps as the general public. In addition, many informal interagency meetings and consultations about the plan were held. The United States Forest Service, Bureau of Land Management, Fish and Wildlife Service, the State of Utah Department of Natural Resources, Utah Division of Wildlife Resources, State of Utah Bureau of Indian Affairs, The Pueblo of **Acoma**, The Hopi Tribe, San Juan County, and the cities of Monticello and Blanding, Utah participated.

Comment: Too few alternatives were presented for most issues. Cumulative **impacts were not adequately** addressed and reasoning presented for “Alternatives Considered but Rejected” was not strong enough to support rejecting these alternatives.

NPS Response: The regulations for implementing NEPA (43 CFR Part 1502.14) require only that the federal agency “rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” The alternatives which were presented in the draft plan and EA were those alternatives the planning team felt were reasonable, given constraints of the General Management Plan, the enabling legislation for the planning area, and the various federal mandates affecting the planning area. NEPA regulations require **inclusion of** a no action alternative and identification of a preferred alternative, but there is no requirement to consider a long list of alternatives for each issue. NEPA regulations (43 CFR 1501.2) require **description of** alternatives to recommended courses of action only in cases involving unresolved conflicts **concerning** alternative uses. In the EA, fewer alternatives were presented **for less complex issues and a wider ranges** of alternatives were presented for more complex issues, or for issues where solutions to **management**

problems were unclear or unresolved. The number of alternatives described per issue was in full compliance with the letter and spirit of NEPA.

Alternatives **Considered** but Rejected were briefly described, as required. Cumulative impacts were described to the extent they could be anticipated at this time. Monitoring of future impacts is an important element of the plan.

Comment: Management tools that monitor impacts to resources and define acceptable levels of impacts, such as Limits of Acceptable Change, were not used in this EA.

NPS Response: The planning process was based largely on the Visitor Experience and Resource Protection planning process (VERP), currently being developed by the National Park Service. Since several members of the planning team for this EA were also on the VERP team, the VERP process was implemented as it was being developed.

The last step in the VERP process is to monitor the impacts of management decisions, and make sure resources and visitor experiences are properly managed. This monitoring step will begin as soon as this plan is implemented.

Comment: The planning process and the alternatives proposed do not comply with NPS-77, NPS Management Policies, the Organic Act, and the General Management Plan by not allowing for adequate recreational opportunity in the face of increasing demand.

NPS Response: The planning process was in full compliance with these guidelines and mandates. The planning process and all alternatives selected in the plan are based on fulfilling the NPS mandate "... to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. " The planning team recognized the diversity of recreational uses and visitors to the planning area, and they described alternatives and selected management solutions based on providing access for all types of visitors, while ensuring long-term and short-term preservation of resources. The balance sought between numbers and types of visitors and protective measures is in full compliance with the mandates and policies guiding the NPS.

Comment: Discussion of wilderness and the effect of the proposals on wilderness were lacking.

NPS Response: As shown on pages 16, 17, 44, 60 of the EA, the 1974 Wilderness Recommendation for Canyonlands, and wilderness recommendations for the Natural Zone within Glen Canyon, were fully incorporated in the alternatives presented.

ISSUES AND ALTERNATIVES PRESENTED

Orange Cliffs

Comment: The Orange Cliffs Unit of Glen Canyon National Recreation Area was not **designated by** Congress to be a National Park, yet under this plan, it will be managed in the same manner as, **and by**, Canyonlands National Park.

NPS Response: Canyonlands National Park will manage recreational use in the Orange Cliffs; Glen Canyon National Recreation Area will continue to manage all other uses in the Orange Cliffs. Enabling legislation for Glen Canyon provides the same level of protection for the recreation area as the enabling legislation for Canyonlands National Park; therefore, management solutions to problems in Maze will work equally well in the Orange Cliffs.

Zones

Comment: **The** proposed zone system is too complex. It would be nearly impossible to get sequential nights in zones desired and would force use into less popular, more pristine areas.

NPS Response: The planning team agreed. The entire zone system has been revised making it less complex.

Comment: Level of use in each zone should be based on something more substantial than 1992 use. Also, in zones that have permits that are available only once a week or a month, historic levels of use would not be met.

NPS Response: The highest monthly use ever recorded was in April of 1992. Since the planning process was initiated at that time in response to negative impacts on park resources and visitor experiences, the use of April visitation levels was logical. The only time of year where current levels of use will be curtailed will be during spring break season--when visitation is at its highest and potential for resource damage greatest.

Roads

Comment: There was no serious consideration given to closing a large portion of the roads which divide up the backcountry.

NPS Response: **The** backcountry planning process is not the place for making decisions about closing major roads. Opening or closing major roads is an issue to be dealt with during development of a new General Management Plan.

Comment: 36 CFR Sec. 4.10 prohibits designation of ORV routes and areas in National Parks. We believe that **ORVs** are vehicles that are capable of cross-country travel over natural terrain (see Conservation Law Foundation of New England Inc. V. Secretary of the Interior, 864 f. 2d 954, 956, fn. 1 [1st Cir. 1988]). Sec. 3(a) of Executive Order 11644, 37 Fed. Reg. 2877, **(1972)**, as amended by Executive Order 11989, 42 Fed. Reg. 26959 (1977) outlines the circumstances in which off-road vehicle use may occur in NPS areas. The plan does not make the determination that this use is suitable.

NPS Response: Major questions of vehicular access and designation of roads are dealt with in the General Management Plan, not through the backcountry management planning process.

Comment: Reasons presented for closing roads were not adequate. Also, areas that are closed to vehicles, but still allow hikers, will continue to have resource concerns. Resource damage by hikers was not analyzed.

NPS Response: One of the primary goals of the plan was to balance access and restrictions placed on all types of backcountry users. The planning team, as well as the enabling legislation for the planning area, recognized that multiple forms of access and the differing impacts resulting from each type of access (foot, vehicle, etc.) could be accommodated in the backcountry. Resource damage by hikers was given full consideration as demonstrated by the newly designated campsites for backpackers. New rules and regulations for backpackers are found throughout the plan. Where areas will be converted to hiking trails, it has been determined by the planning team that the foot traffic expected in that area will be sustainable without unreasonable resource damage. Proposed road closures were based on natural, cultural or social resource concerns.

Salt Creek and Horse Canyon

Comment: There is no definitive proof the road in Salt Creek has caused any significant environmental damage. Studies in this area have been inconclusive.

NPS Response: There have been numerous studies done in riparian areas demonstrating that the presence of unvegetated areas (such as roads and campsites) negatively impact many wildlife species such as birds, reptiles and small mammals. It has also been repeatedly demonstrated that unvegetated areas result in greater water runoff (thereby reducing water available locally to plants) and greater sediment production. Sediment production is of concern because it can impact aquatic species, as well as result in widening of these areas. Widening of riparian corridors can result in increased water temperatures and negatively affect both fish and aquatic invertebrates.

Mitchell and Woodward's studies (1993) in Salt Creek indicate that the presence of the road has resulted in decreased bird, small mammal, aquatic invertebrate and vascular plant populations when compared to the immediately adjacent area without the road. This study was as definitive as any that could be done in this area, given that the road already exists and is in use. An additional study has documented that the road has negatively impacted aquatic invertebrate populations, verifying the findings of Mitchell and Woodward.

Erosion has increased due to the presence of the road, which has been driven by over 1000 vehicles per month in peak periods. Deteriorating conditions have been noted by numerous drivers.

Comment: Damage to water resources would be continued under the proposal.

NPS Response: *The only* possible vehicular access to Angel Arch is the Salt Creek Road. If the road were rerouted out of the pools of water and onto the stream bank in the limited places where this is even possible, riparian vegetation would be adversely impacted. By limiting the number of vehicles driving in Salt Creek, impacts on the wetlands will be reduced. Furthermore, converting Davis Canyon road to a trail will significantly improve the wetlands in Davis Canyon.

Comment: Horse Canyon does not have the ecosystem concerns of other areas suggested for closures. A

“guided walk only strategy” is not needed.

NPS Response: The proposed guided walks for Horse Canyon were proposed to protect cultural resources--not natural resources. The proposal recognized that if the traffic was reduced or restricted in Salt Creek, then visitors displaced from Salt Creek would move into Horse Canyon. Since Horse Canyon is relatively pristine (in both natural and cultural resources), changes in the Salt Creek Road management would significantly impact Horse Canyon resources. Proposed guided tours have been eliminated in the final plan.

Comment: Closing Salt Creek violates the General Management Plan and the Organic Act by removing access to Angel Arch for most visitors.

NPS Response: The draft plan proposed elimination of vehicular access, not hiking access. However, based on public response, staff patrol concerns, the importance of Angel Arch as the destination, and improved protection of the riparian environment, the road to the arch will remain open to reduced numbers of vehicles.

Climbing

Comment: A clear definition of canyoneering was not presented.

NPS Response: Canyoneering has been defined in the final plan and rules and regulations for canyoneering have been clarified.

Comment: There has been no data presented to support the severity of the climbing restrictions proposed.

NPS Response: In response to comments on the EA, proposed climbing closures for the Maze District, the Needles District, and the Orange Cliffs Unit have been eliminated. Existing climbing closures for the Salt Creek Archeological District of the Needles District, the Horseshoe Canyon Unit of the Maze District, and on named arches or natural bridges will continue. Climbing regulations are consistent with the draft National NPS Climbing Guidelines. The bulk of Canyonlands National Park will remain open to clean climbing. The most popular rock climbing routes in southeast Utah are outside the park boundaries and outside the jurisdiction of this plan.

Commercial Use

Comment: The proposal, including reduced group size, very limited numbers of permits, and the elimination of some types of commercial use will eliminate commercial use, or make the costs of running tours prohibitive. No economic impacts were addressed.

NPS Response: Reduced groups sizes may result in an increase in the cost of commercial tours; however, commercial use will certainly not be eliminated by the plan. Changes in group size and allocation of permits will be instituted with adequate lead time so concessionaires may adjust their operations. The reservation system will facilitate commercial use since tour operators will be able to plan their itineraries well in advance. Economic impacts were addressed on page 58.

Backpack Camping

Comment: Location of designated backpacking campsites were not shown. Without knowing locations,

numbers of sites and how much damage to an area camping causes, it is difficult to assess this part of the plan.

NPS Response: These locations had not been selected at the time of final preparation of the Backcountry Management Plan. Before a campsite is designated, the area will be surveyed for flood plain concerns, cultural resources and threatened or endangered species. Campsites will not be located in areas that adversely impact these resources or are in a flood plain.

Reservations

Comment: Details of the reservation system and the fees for reservations were not presented.

NPS Response: Details were not fully developed at the time of plan release. The reservation system will be modeled after the system currently in use on the White Rim Road, but is expected to undergo some fine tuning in the first year of operation. As of January 1995, information on the reservation system will be available by calling 801-259-4351. A list of current fees will be available on request.

Group Size

Comment: There is no evidence that shows that current group size is too large. There is no rationale behind the group sizes chosen.

NPS Response: The group sizes selected were based on the Canyonlands General Management Plan mandate to provide for different visitor experiences, and on observations of visitor behavior and resulting social and resource conditions in each area.

The General Management Plans for Canyonlands and Glen Canyon require management to provide diverse recreational opportunities for the visitor. These activities are restricted by land use planning guidelines that set limits on the types of activities that can occur in various districts or zones. While the Needles and the Island in the Sky districts are to provide for a range of recreational experiences, the Maze district is to be managed with "remoteness and self-reliance the principle elements of the visitor experience." The Orange Cliffs Unit is divided into two zones, one of which is managed to be "relatively undisturbed, isolated, and remote," the other of which allows slightly more "susceptibility to the activities of man." The lower group size numbers for the Maze and the Orange Cliffs reflect these mandates. The group size limits in the other districts correlate with the intended social and recreational experiences in those districts.

When the behaviors of large groups and smaller groups are compared, larger groups show a greater potential to cause resource damage. While all campsites experience some degree of damage, larger groups use more area for tents, create more social trails between tent, kitchen and bathroom areas, and generate an increased concentration of human waste. Where campsites are designated, and the impacts inherent to camping are limited to those areas, some of this problem is **mitigated**. Lower group size for at-large backpack camping is particularly important.

Studies have found large groups to be responsible for much of the damage to cultural sites in the backcountry. Observations of visitors to parks and cultural sites around the world (Gale and Jacobs, 1986 and 1987) indicate that much of the damage is due to large groups of people attempting to enter too small an area.

Recent sociological studies at Arches National Park also indicate that the group size limits set by this plan are appropriate. People surveyed indicated that group size limits should be eight on front-country trails. The intent of the Park Service is to provide a range of recreational opportunities. If eight is appropriate for front-country trail group size, a lower number should be appropriate for the more remote backcountry experience. With group sizes of seven (Island in the Sky and Needles) and five (Maze and Orange Cliffs), a spectrum of back-country experience is offered.

The proposed group sizes will **accommodate** 90 percent or more of the current groups in Canyonlands. Statistics from Canyonlands backcountry permits from 1988 to 1992 for backpacking groups show that:

- In the Maze District, 90 percent of the groups were less than or equal to five (the proposed maximum group size).
- In the Needles District, 96 percent of the groups were less than or equal to seven (the proposed maximum group size).
- In the Island in the Sky District, 98 percent of the groups were less than or equal to seven (the proposed maximum group size).

Day Use

Comment: Methods for dealing with day use are inadequate or unrealistic. Data for the impacts of day use is not presented.

NPS Response: Potential for growth in day use has not been extensively addressed in this Plan. It is a topic that the National Park Service is beginning to grapple with nation wide, and it will be examined in a future revision of the General Management Plan.

Human Waste

Comment: Nothing indicates that the Maze district has a more severe human waste problem than the rest of the Park, yet restrictions are more strict.

NPS Response: Given the shallow soils in the Maze, the problem of human waste deposits is particularly severe there. Because the roads into the Maze are too rough for toilet pumper trucks, the only cost effective and sanitary method of waste disposal is to have visitors containerize and pack out their own.

Off Season Use

Comment: It is not clear how off-season use will be controlled if it exceeds the amount **defined** in the proposal.

NPS Response: At the time that use exceeds the limits set in the proposal, managers will review the type and concentration of use and **define** necessary limits.

NATURAL RESOURCES

Wildlife

Comment: No data has been presented to show that human visitation has impacted bighorn sheep. The closures to protect bighorn sheep are severe.

NPS Response: Research on the effects of human activities on bighorn is underway in Canyonlands. Meanwhile, the herd in the Needles District has been severely reduced due to disease. The small herd remaining in the area slated for closure in the Needles District concentrates its activities around the water source. The main route of travel for visitors to the area also passes the water source. Escape terrain (slopes used by bighorn for safety when disturbed) nearby is limited, resulting in sheep moving from human activity, being re-disturbed, then moving again. Unless research proves otherwise, these sheep must be protected from further stresses until the population can recover.

Comment: Raptors and eagles are tolerant of human activities in other locations. Measures for their protection seem strict.

NPS Response: The planning team re-evaluated the closure for eagles, considering the time of year and use levels, and this closure was dropped.

It has been documented many times that human disturbance can cause raptors to abandon their nests. It is especially important that raptors listed under the Endangered Species Act be protected from disturbances.

Comment: The NPS must close Salt Creek to vehicle use because the endangered southwest willow flycatcher has been found there.

NPS Response: The Southwest Willow Flycatcher was observed in Squaw Creek Canyon, not Salt Creek. Salt Creek has not yet been surveyed for the species. (The flycatcher is a proposed endangered species.) No actions have been proposed that are believed to disturb this species.

Comment: There is no discussion of the measures that will be taken to ensure an adequate buffer zone around Mexican Spotted Owl and Peregrine Falcon nests.

NPS Response: Managers at Canyonlands National Park and Glen Canyon National Recreation Area have chosen not to advertise locations of the nests of these raptors by closing areas around the nests at this time. Nests should be adequately protected by regulations governing uses of the areas in which they are located. If conflict between visitor use of an area and nesting raptors develops, areas may be closed to use in the future.

Vegetation

Comment: The plan makes no mention of current or proposed exotic plant controls.

NPS Response: Exotic plant control is discussed in the respective Resource Management Plans of the park and recreation area. It is not a topic directly related to activities proposed in the Backcountry Management

Plan.

Comment: Too much emphasis is placed on the effects of trampling crusts and soils. There is no data in the proposal to show the specific effect of trampling or the extent of the problem.

NPS Response: Soils in Canyonlands are highly compactible. Trampling increases compaction, which in turn reduces water infiltration into soils. This decreases moisture available to vascular plants for growth. Trampling also decreases soil microbial populations, which are important for keeping nutrients available for vascular plant growth. Soil crusts, essential for reducing both wind and water erosion, are also destroyed by trampling. There are many published and unpublished data sets supporting these findings (see, for example, Belnap, 1993, 1992, and 1990, and Belnap and Gardner, 1993).

Comment: Relict areas chosen for closure are the most accessible and heavily visited. Impacts to these relict areas are subjective.

NPS Response: Impacts to all relict areas in the park are highly visible. Multiple trails, trampling, invasion of exotic plants, etc. are visible to visitors, as well as scientists studying the relict areas. The two areas selected for closure, out of the many relict areas identified by the Nature Conservancy, were indeed chosen based on amounts of visitation. See the section on relict areas for more information.

Water, Floodplains, and Night Sky

Comment: Adequate data was not presented to show that human use of water sources has been damaging.

NPS Response: Specific data on impacts of visitors on Canyonlands water sources are lacking for the planning area, although pollution of water sources by human use in other areas is well documented. A goal of the Resource Management Division of the park is to determine impacts from human use of water sources. Until such studies are funded, the rules will remain on the conservative side for the protection of wildlife.

Comment: The broad definition of floodplain, causing campsites to be closed, should be re-evaluated.

NPS Response: Floodplains are closed to campsites in NPS Management Policies and Executive Orders 11888 and 11900. The definitions are set by NPS policy, not park staff or the planning team. Floodplains in the backcountry were identified by professional hydrologists who identified 100 year, 500 year, and maximum possible floods based on standard hydrological definitions.

Comment: Protection from lights and glare for night sky viewing was not addressed.

NPS Response: These are significant resources in Canyonlands National Park and the Orange Cliffs Unit of Glen Canyon National Recreation Area. Protection of the night sky has been addressed in the Resource Management Plans for the park and recreation area, and actions taken in the Backcountry Management Plan will not impact these resources.

CULTURAL RESOURCES

Comment: Without a complete inventory, the NPS cannot know what its cultural resources are, the extent of impacts and the best ways to manage these resources.

NPS Response: Less than 2 percent of the planning area has been inventoried for cultural resources, making it difficult to plan or manage for long-term preservation of significant resources. However, for the last 8 years, a program has been in place to monitor the most heavily visited sites in each district. Based on this data, visitor impacts are well known, and a number of management strategies are being developed based on these data, as well as on management data from cultural sites around the world (e.g. Gale and Jacobs, 1987 and 1986).

SOCIAL RESOURCES

Comment: The social data presented are inadequate.

NPS Response: Quantitative data specifically gathered on visitors to the planning area are quite limited; however, years of watching and working with visitors to the planning area provides sufficient data to develop alternatives and select management solutions. The NPS intends to continue and expand the gathering of data on visitor use in the backcountry.

Comment: The charts showing growth in visitation are misleading. Five years of data are too few, and data for Figure 1 should be described as linear rather than exponential.

NPS Response: A primary reason for using only figures from recent years is to ensure that the method of calculating total visitation has not changed. The further back the data points, the greater the likelihood that different multipliers were used to obtain the total numbers. A least-squares regression equation showed the best fit was a third-order polynomial with a coefficient of determination of 0.990. The straight line (linear growth) curve fit had a weaker coefficient of determination of 0.938.

Comment: The NPS does not have to regulate based on people's impact on people. This plan relies heavily on a vague definition of solitude and an assumption that not enough solitude exists.

NPS Response: The NPS is mandated to provide for a high quality visitor experience. This includes limiting intensity of use in frontcountry campgrounds, providing for backpacking campsites away from other parties, regulating group size, and restricting pets. Visitor impacts on other visitors are greatest in areas of heavy use, such as overlooks and short interpretive trails, and the backcountry should provide an alternative experience.